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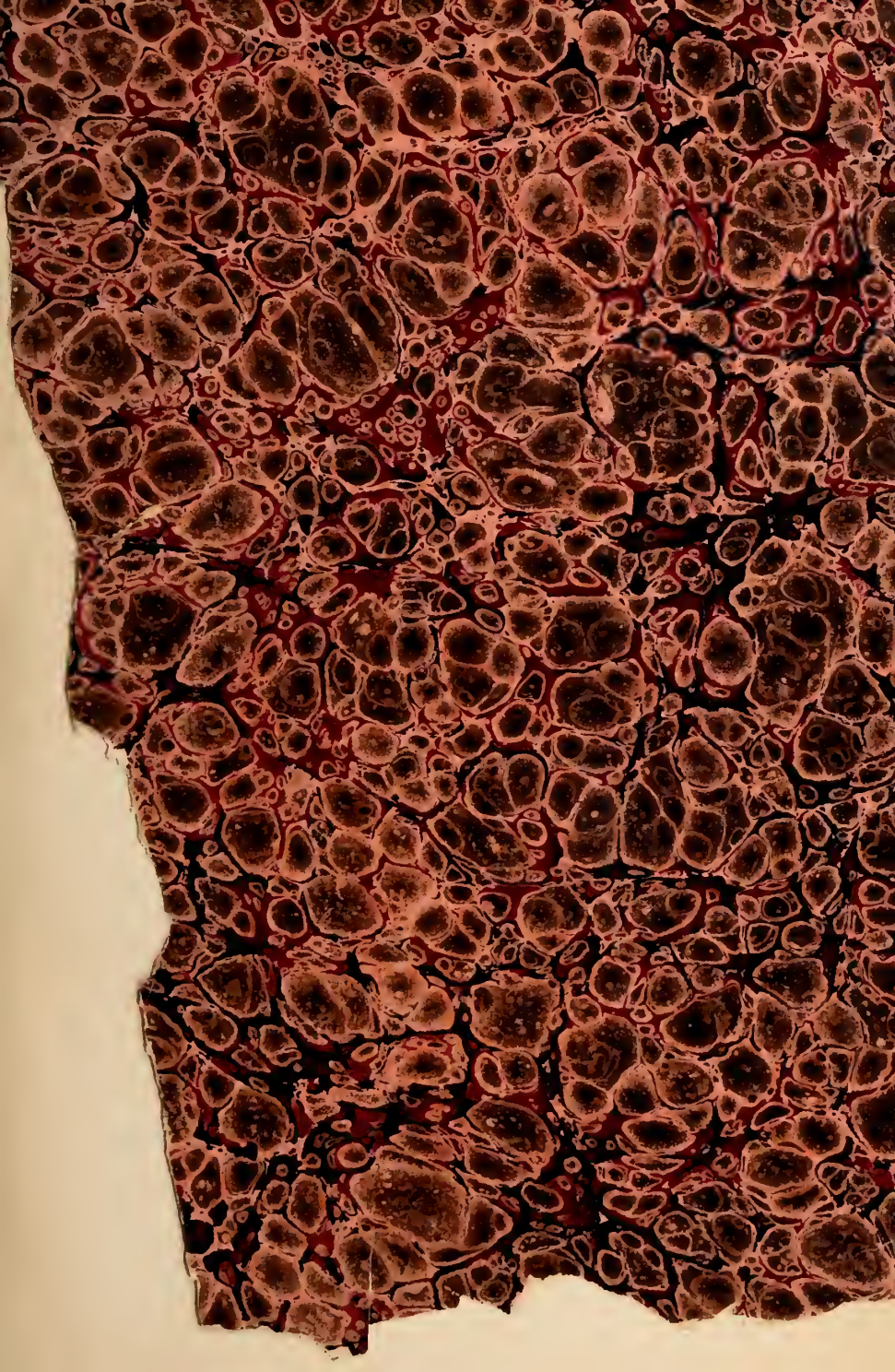
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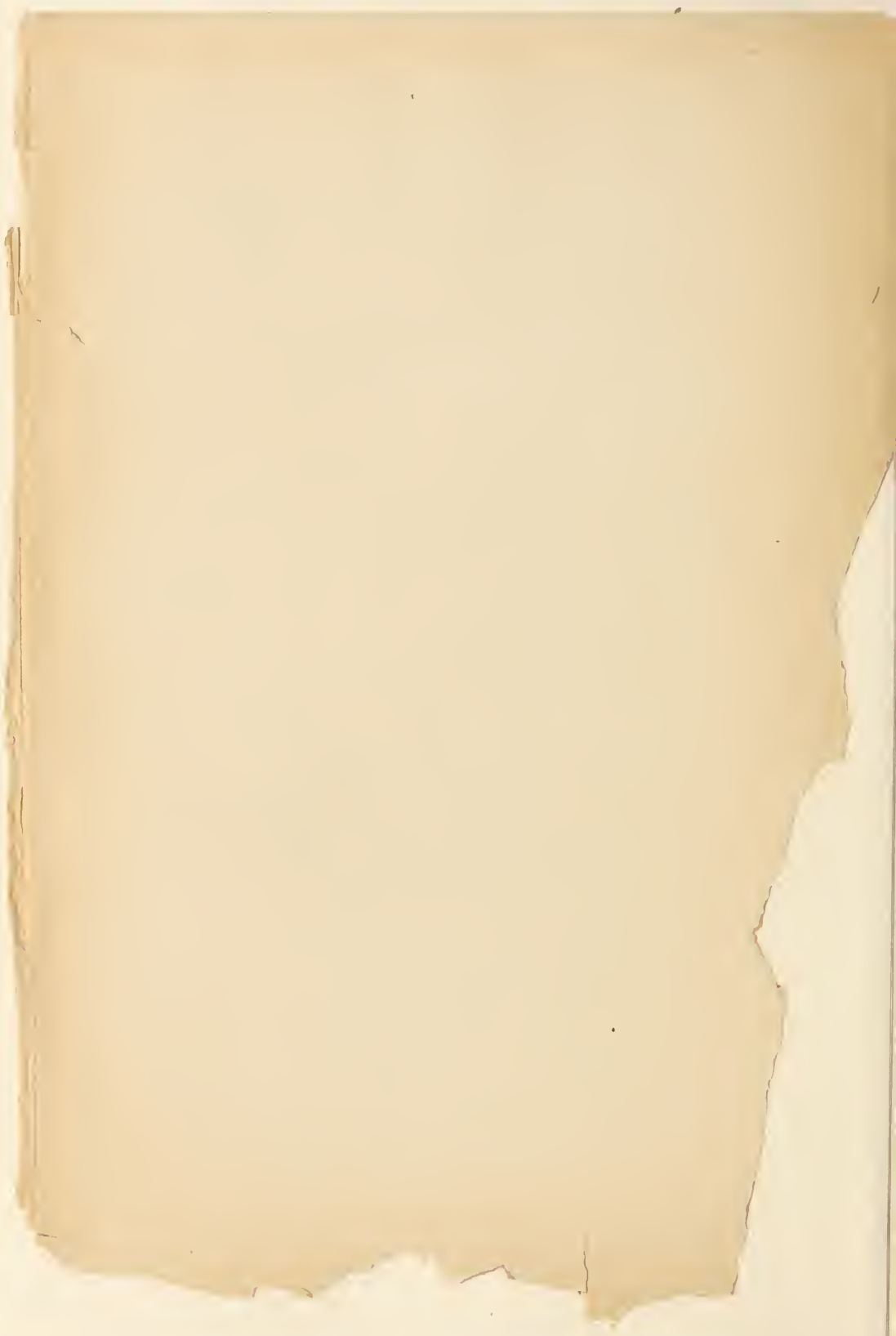
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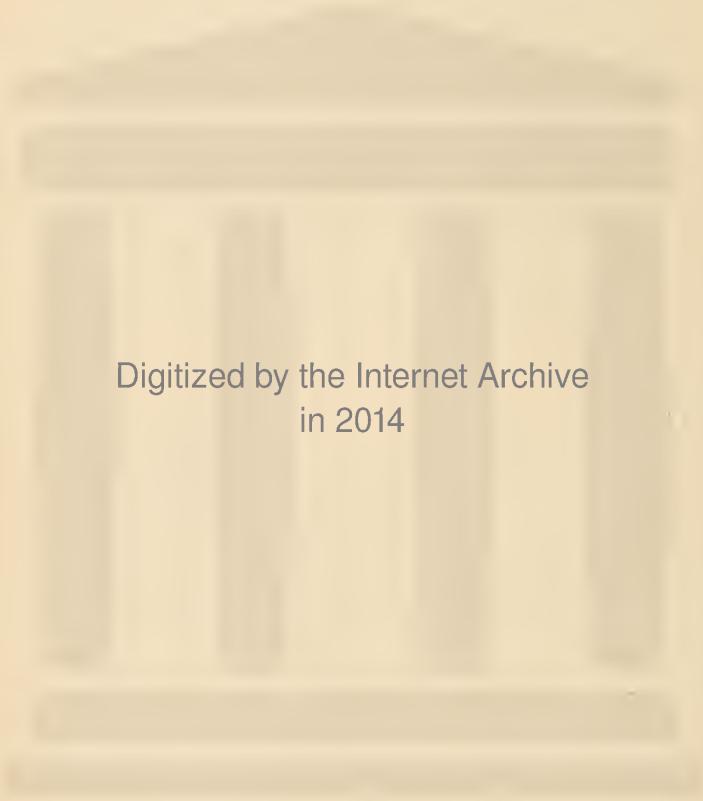


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THE
Alienist and Neurologist

A QUARTERLY JOURNAL

OF

Scientific, Clinical and Forensic
Psychiatry and Neurology.

*Intended especially to subserve the wants of the
General Practitioner of Medicine.*

"Quantam ego quidem video motus morborum fere omnes a motibus in systemate nervorum ita pendent
ut morbi fere omnes quodammodo Nervosi dici queant."—Cullen's *Nosology*: Book II., p. 181—Edinburgh Ed. 1780.

VOLUME XVI.

PUBLISHED AND EDITED BY

C. H. HUGHES, M. D.,

And an associate corps of collaborators.

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BUSINESS MANAGER.

ST. LOUIS:

Press of Hughes & Company.

1895.

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THE
ALIENIST AND NEUROLOGIST.

VOL. XVI. ST. LOUIS, JANUARY, 1895. NO. 1.

ORIGINAL CONTRIBUTIONS.

Evidence of Sanity in Criminal Cases.*

By JAS. G. KIERNAN, M. D., Chicago.

Fellow of the Chicago Academy of Medicine; Professor of Forensic Psychiatry, Kent Law School, Chicago; Professor of Nervous and Mental Diseases, Milwaukee Medical College.

PSYCHIATRY, despite the broad scientific basis of the common law, is but too often regarded as a detective of the state in criminal cases.

Sane motives, variability in delusional acts from ordinary human causes, premeditation and skill in violation of law, concealment of such violation, flight from the immediate consequences of law violation, simulation of insanity, accomplices, and confession of crime, are very generally regarded as proofs of sanity. The question raised in psychiatry, is but too often not whether a thing be a fact but whether it have consequences supposed to be dangerous to Society.

This detective bias, foreign to science and the spirit of the common law alike, plays too often a part in forensic psychiatry. The matter is not approached from a scientific standpoint but from an *a priori* society protection basis; the source of all mob law and tyranny.

* Read before the Chicago Academy of Medicine, February, 1894.

Motive, it is widely claimed, is evidence of sanity when seemingly the impelling force to crime. Is this scientifically true? Motives of the sane are not always what they seem but often involve a nice question of psychological analysis. Men have committed murders from seemingly sufficient motives when the real one was suicide at the hands of the executioner. Frederick the Great's soldiers often killed "children sure of heaven" to avoid the guilt of suicide by securing death at the hands of the executioner. Arson has been committed simply to call attention to zeal as an employee. Such complexity attends the motives of the sane. In the domain of morbid mental processes, the complexity is intensified. Some eleven years ago in an analysis of attacks on the medical officers of insane hospitals, I showed that there were demonstrable five propositions:*

FIRST—Criminal acts committed by the insane often originate in logical motives.

SECOND—Acts committed by the insane for insane reason are often referred to logical motives.

THIRD—Acts committed by the insane may be the distant outcome of an insane delusion yet the act be an outcome of a logical, seemingly sane motive.

FOURTH—The execution of decidedly insane projects may be interfered with by a healthy conception.

FIFTH—An insane man committing a homicide for insane reasons may take due precautions to preserve his life for execution of delusional projects.

Dr. J. P. Gray† in the Guiteau case denied emphatically the truth of the first and fifth proposition. This denial is rendered totally unjustifiable by the following case in a table of homicides furnished by him, on direct examination, in the same trial.

CASE I.—A thirty-two years old intemperate, disreputable "chronic maniac" killed a boy by repeated stabs with a pitchfork and knife. The motive was personal hatred and revenge. The deed was done in day time. The murder was premeditated, plans of concealment arranged and weapons

* American Journal of Neurology and Psychiatry, 1883-4.

† Trial Chas. J. Guiteau Vol. II., p. 1684.

washed. The patient became demented and was removed to the county institution.

Dr. D. R. Brower has observed the following case:

CASE II.—A superintendent of the Williamsburg (Va.) insane hospital was a gruff dictatorial man. An insane planter of good family questioned him courteously.

"Don't bother me with your nonsense" was the reply. The question was repeated and answered with a taunt, whereupon the patient struck down the superintendent with a chair, fatally injuring him.

Such conduct was nothing more than might have been expected under the same circumstances from a hot tempered man.

In the first proposition there is therefore nothing startlingly novel. Indeed numerous equally demonstrated cases led Judge Wilson of the Wisconsin Supreme Court* to decide as follows, in full consonance with the spirit of the common law, "that the instructions to the jury upon the trial of the issue of insanity; that if the defendant at the time of the killing was sufficiently sane to deliberate and premeditate a design to effect death, then he was sane within the spirit and meaning of the law although he may have been in truth subject to insane delusions on other subjects, and that if he had sufficient power of mind to deliberate and premeditate a design to effect death, you should find him sane," unexplained are clearly erroneous as they set up as an absolute test of sanity, the power to deliberate, premeditate and design. They make the presence of sufficient intelligence in the party accused to form a design to do a criminal act, conclusive evidence that he is sane and subject to punishment if he execute such design. The presence of intelligence is by no means an absolute test of sanity for with intelligence there may be an absence of the power to determine the true nature and character of the act, its effect upon the subject and the true responsibility of the act—a power necessary to control the impulse of the mind and prevent the execution of the thought that possesses it.

The truth of the second proposition is excellently illustrated in the following two cases. One coming under my own

* North Western Reporter Vol. XIV.

observation. The other reported by Dr. Lockhart Robertson.*

CASE III.—Patient in the New York City Insane Hospital made an attack on Superintendent R. L. Parsons. To myself and another physician who had charge of him some years later he claimed that Dr. Parsons treated him insultingly in asking for his discharge. The real cause for the assault was the delusion that Dr. Parsons violated his sister every night. That the influence of the first (alleged) cause was but slight if at all existent was shown in the fact that Dr. Parsons' successor treated him very insultingly without being assaulted.

CASE IV.—The patient stabbed an attendant in the head. He took advantage of the attendant being alone and carrying a tray of utensils. He attempted to gouge out the eyes of Drs. Huxey and Hill with a sharpened stick. The patient was hallucinated and had the delusion that he was a prophet. Afterward he quieted down and was so seemingly recovered that his discharge was contemplated. The question was referred to the Commissioners in Lunacy six months after the assault: twelve days thereafter he was treated for malaise by the assistant superintendent in a surgery where instruments were in his reach. The next day he attacked the assistant superintendent with a pointed stick. He said that this attack was due to an objection he always had to the medical officers and that he knew what he was about.

Here the alleged motive was one on which a criminal prosecution could have been based. Had the assaults been committed elsewhere than in an insane hospital, "experts" would have pronounced, and juries adjudged, the accused sane.

The truth of the third proposition is demonstrated by the following two cases:

CASE V.—Dr. G. C. Palmer, of Flint, Mich., reports that Dr. Adams, assist. supt. of the Kalamazoo Asylum, was killed by a patient suffering from insanity due to sunstroke the onset of which was marked by maniacal symptoms. The patient after these passed off, became confused and on one or two occasions passed into a stuporous state for some weeks, requiring artificial feeding. At the time of

*Sankey's "Mental Disease."

the homicide, irritability and mental enfeeblement were the most marked symptoms. The patient also had the delusion that he had changed his sex. Dr. Adams had detained several of his letters deeming them too obscene to send and tried to induce the patient to write differently. The day before the homicide, the patient handed the attendant a letter which the latter forgot to deliver. At Dr. Adams' visit next morning, the patient asked him if he had sent the letter. Upon a negative reply, the patient stabbed Dr. Adams with a pen-knife which he had concealed in his sleeve with the blade open. He admitted that he had carried this knife for two days and that the night before the homicide he had planned to kill Dr. Adams in the event that the letter was not sent. He has never expressed any regret but has repeatedly threatened to kill the other physicians were his letters not sent.

CASE VI.—Dr. Orange* was attacked under the following circumstances. The attack, although originating in an insane delusion was the direct outcome of a demonstrably logical process of reasoning. The patient several years previously, shot at the Master of the Rolls to obtain justice. As this did not succeed he made up his mind a year previous to the attack on Dr. Orange, that nothing less than murder would be sufficient to call public attention to, and deliver him from, the conspiracy of which he was the victim.

The truth of the fourth proposition is illustrated in the case reported by Dr. Yellowlees.

CASE VII.—A joiner became a printer in order to publish his insane documents. For seven years he had been a laborious teacher and precentor in the church. He became noted for his sensitiveness which formed the basis of persecutory delusion. He summoned people before a magistrate for hallucinatory persecution. They were discharged; whereupon he assailed the magistrate as an unjust judge. In consequence he was sent to prison and thence to an insane hospital, whence he was discharged after a brief residence. He became a publisher and issued numerous insane pamphlets. His hallucinations continuing he had numerous arrests made, the accused being

* *Journal of Mental Science*, July, 1882.

always discharged. In consequence of these failures to obtain justice he determined to take the law into his own hands. He declared openly he would kill somebody, and fortified his house against his enemies and the police. He threatened that an attempt to take him would result in his entry swimming in blood. He was thereupon committed as a dangerous lunatic to the workhouse insane department where he assaulted the medical officer. He was removed to the Morningside Insane Hospital, where he remained for years under the care of Drs. Skae and Mac Kinnon. He frequently attempted to kill in a cunning, premeditated fashion. He had much difficulty from rising in the hospital chapel, while acting as precentor, and braining Dr. MacKinnon with a chair. For months he occupied himself in fabricating a slung shot with which he brained an attendant. He attempted to kill another attendant under circumstances which led Dr. Yellowlees to remark that "it is scarcely possible to describe his devilish ingenuity, deliberativeness and determination and his fiendish delight in his attacks." He spent much time in writing about extravagant delusions and inventions.

CASE VIII.—Came under my observation at the Cook County Insane Hospital. An American, in consequence of a row with a drunken Irishman in which the last was totally to blame, was arrested, found insane and sent to the insane hospital. He had a decidedly bad heredity but had not been under hospital care until his arrest albeit he had reached the age of 60. He was a "model youth" and had bright dreams of the future over which he delighted to muse in solitude. These, in his opinion would have been realized but for the great influx of foreigners into the United States. During his youth his ability had received great commendation from many men who took a roseate view of his political future. He had, from time to time, in the "waking state", what he termed visions of his future. He was an active "knownothing" politician. On the decadence of that movement his delusions of persecution became decidedly dominated. There are in the United States, he says, two great parties; one, AntiAmerican ("red and green"), and the other, American ("white,") The "red and green" are mostly Irish. The "white," mostly Americans

with some "Germans." In consequence of persecution by the "red and green" foreigners, he led a wandering life. These were determined to destroy all Americans of great ability. He had had auditory hallucinations, and used to argue with the hallucinations which were, he stated, quite logical. For eight years prior to admission he had smell hallucinations of "senna," potash and gases. His enemies placed below his room door a box two feet high by about seven feet long with a shelf in it on which was a charcoal stove with a plumber's pot. The "stuff" is put into the pot and the "smells" thus generated. He never saw the apparatus, but *heard* the people making it. At times these smells became so annoying that he had to arrange special ventilation. He built a canopy of paper and cloth over his bed and secured communication with the open air by means of a tin tube. On application to the police for protection he was told to cry "police" when bothered by his tormentors. For a long time this had a good effect, but at length it created such excitement that he was forced to abandon it for fear of disturbing his neighbors and adding them to his persecutors.

Motive when present at all in the first case was of insane origin based on reasoning from premises of delusional origin, hence the patient naturally exhibited premeditation and skill. The case demonstrated the falsity of the dictum that the insane are not affected by outside influence, since this pious persecutory lunatic was only prevented from braining Dr. MacKinnon during the chapel services by his reverence for the sanctity of the occasion. In the second case, the healthy conception of being under protection of the police dominated the hallucination, and thereby prevented violent demonstration. The influence of outside factors on the delusions of the insane is shown in the fear of adding the neighbors disturbed by his cries of police to his persecutors. The escapes from insane hospitals furnish many illustrations of the truth of this last proposition, as Dr. J. Edwardes Lee,* in an analysis of escapes from insane hospitals, published nearly half a century ago, pointed out.

CASE IX.—A patient ran away from the Worcester, Mass., insane hospital. When all hopes of his return were

* Amer. Jour. of Insanity, Jan., 1847.

given up, he, much to the surprise of the officers, walked into the office saying that unintentionally he had committed a great crime, since in the excitement of escape he had forgotten that his clothes were property of the state.

The assault on Dr. J. P. Gray by Remshaw furnishes decided evidence of the truth of the fifth proposition.

CASE XX.—Remshaw, a persecutory, delusional paranoiac entered the Utica insane hospital, and shot Dr. Gray, whom he had repeatedly bathed in a Utica Turkish bath establishment without the latter recognizing his mental state. He then fled into an adjacent town to his brother-in-law and said he was going to New York. He afterward went to the jail and gave himself up. A lunacy commission appointed by the court found him insane and sent him to the Auburn (N. Y.) insane hospital.

The case cited from Dr. Gray is proof positive in the same direction. The "homicide was premeditated, plans of concealment arranged, weapons washed." Ray remarks* "that the insane do certain things as well as they ever did. They plan, contrive and anticipate in furtherance of a special purpose." The truth of this remark is evident especially in the escapes from insane hospitals. Dr. J. Edwardes Lee, in the article to which reference has already been made, points out that:

"Many insane show much skill and stratagem in originating and carrying out plans for this purpose, in procuring and secreting instruments and especially in deceiving their attendants, making them believe they are well contented and do not desire to leave. Rare and curious is the collection of instruments collected in such an institution; keys, made out of wood, pewter and wire, files manufactured from old knives, saws from hoop-iron and screw drivers from ten-penny nails. No less skill is shown in concealing their operations; making fac-similes of screwheads out of bread and covering in different ways the gaps they have made until they can get further opportunity to work. Rarely, however, do they combine to any great extent, although instances of two or three uniting in some project to gain their liberty, are not uncommon." He cites in illustration the following cases:

* American Journal of Insanity, October, 1874.

CASE XI.—A patient of the Utica Insane Hospital had eloped from a distant institution. His anxiety to get away was known to a clever companion, "The Major." After due consultation the two united on a plan which was mutually satisfactory. "The Major" had opportunities for getting instruments which his friend did not enjoy. The agreement was that the "Major" should procure a key by which his friend would escape, on condition that he promise to raise an army of 10,000 men with which he was to return, sack the institution, imprison the officers, and liberate the inmates while the "Major" remained to co-operate within the walls. Everything passed off excellently so far as the escape of the emissary was concerned who, needless to say, never returned with the army.

Dr. Ayl* narrates the following case;

CASE. XII.—Four patients in the same ward of the Ohio Insane Hospital devised a plan of escape. One was a New England Yankee, one a German, one English and the fourth, a Pennsylvanian. All were comfortably situated and doing well; the first three especially. Becoming discontented they began to consult together and contrive plans of escape, encouraged by the Pennsylvanian, a persistent eloper. A plan devised by the Yankee met with universal acceptance for it was well calculated to outwit the medical officer and attendant, provided they could safely elude the perpetual curiosity and vigilance of a very stirring ward whom they were afraid to trust, well knowing his candor in such matters, and being fully appraised of his partiality for the head of the institution with whom he made a very satisfactory contract to study medicine, for twenty one years. As this famous student was fond of preaching and could easily be set going at that, it was proposed that one or two of the band should keep him at this employment while the others were engaged in carrying out their plans. Having procured the rusty blade of an old trowel left carelessly within reach, they selected an evening, at the commencement of religious services as the best time to take out the window and give them all an opportunity to get out, thinking it probable that their unsuspecting

*Ohio Insane Hospital Fifth Annual Report 1846.

attendant would, upon that occasion, accompany other patients and be a short time out of the way. They commenced daily operations on a front window and succeeded in removing all the screws and fastenings so that it would at any time be easily removed. They carefully disposed of all dirt and filled the screw holes with soft bread to prevent detection. All things being ready for action, the attendant having gone out, they mounted the student on a chair, with his head away from the window, started him on a favorite text and while he was in full oratorical swing, each in succession commenced a hasty escape. A lady who saw the procedure gave the alarm too late to save any but the Pennsylvanian. The others were retaken only after a twelve miles chase.

Similiar plots are reported by Chambard[†] as occurring in French insane hospitals. The instigators are usually paranoiac criminal, and the accomplices, epileptics and paranoiacs.

Over a decade ago,* I pointed out that *folie-a-deux* had important relations in regard to value of accomplices as a test of sanity. In certain cases of this type evidence of seeming collusion is apparent. The following cases illustrate this.

The following cases come under my own observation: [†]

CASE XIII.—A twenty-nine-year-old Irish-American had attacks of incoherent hallucinatory confusion subsequent to a sunstroke. He became recurrently insane thereafter. Alcoholism, associated with irritability, was probably the exciting cause. The attacks, preceded by kleptomania, are epileptoid in type, since in them he is not conscious. The second patient was a congenital paranoiac, with systematized erotic-religious delusions, both persecutory and megalomaniacal.

The third was an epileptic, with post-epileptio-maniacal attacks, followed by conditions of suspicion. The fourth was an epileptic, who, up to the age of fifteen, had grave epilepsy. It gave place to the epileptic equivalent mental state of unconsciousness. These states were followed by periods of paralucid, suspicious, hallucinatory irritability. He "could then walk through the sea and cut the earth in half." These

**Alienist and Neurologist*, 1887.

[†]*Alienist and Neurologist*, 1883.

patients made a seemingly joint attempt to escape. The four were seated in the grounds together, after the usual walk. The third and fourth were in their usual post-epileptic mental states. The patient first described, suggested that they all go home, more from a spirit of mischief than any serious desire for escape. The third patient rushed on the attendant and threw him down, while the other three rushed for the woods. He did not have a clear consciousness of what he was doing as he contented himself with attacking the attendant. He had no recollection of his violence nor of the suggestion of escape, albeit his conduct was evidently prompted by it. The paranoiac looked upon the whole occurrence as a providential means of freeing him from his persecutors. The other three patients he regarded as lunatics, but as they were in his opinion, instruments of providence, he accepted their aid. Strictly speaking, there was in this case no real concerted action on the part of the insane. There were several coincidences which led to the appearance of such a concert. The post-epileptic states rendering the patient liable to respond to suggestions from without in an indefinite manner, the paranoiac delusional state and logical perversion, all combined to give the appearance of a plot to what was the result of quickly-suggested action.

CASE XIV.—A paretic dement, a paranoiac, an epileptic, and a hebephreniac made a united attempt to escape. The paretic dement and paranoiac agreed to escape; the first to secure his unlimited, delusional wealth; the second to escape from his persecutors. The hebephreniac, who was mentally much enfeebled, had accepted the grandiose delusions of the paretic dement so far as to enter into some of the million-making delusional plans. The epileptic was present when the attempt was made, and his action was the result of pure suggestion, as he was in a state of post-epileptic, dazed consciousness. The paretic dement and paranoiac threw the attendant down. The epileptic seized the keys, while the hebephreniac held the attendant's hands. The attempt failed, because the epileptic turned the key upside down in the lock and broke it.*

**Alienist and Neurologist*, 1887.

Such "communicated insanity" may exist independently of insane predisposition* and other conditions cited by La-seegue.† Ball‡ points out that "the influence of the insane on crowds cannot be contested. The epidemics of religious insanity, of hysterical religion, and of demonolatry attest this too emphatically."

The crowd, Fournial§ remarks, may be considered as a being which feels and acts but does not reflect. This individualization is the result of the unconscious but suggestive diffusion of an emotion. It is produced by imitation or by mental contagion. Such a mental state predisposes to the reception of insane notions. The question arises how far can this influence of the insane on the sane extend. The English and American witchcraft epidemics show that entire communities may be affected thereby. The same is shown in the crusades, in the "dancing mania," and to a certain extent in the flagellants. The history of "fire" panics in crowded theatres illustrates the psychological principle involved. The principle underlying the frequent testimony of the sane to the truth of the delusions of the insane appears in the remark of Savage|| that "extraordinary complications result from the occurrence of combination or agreement of persons of unsound mind upon the same delusion." Despite all dicta on the subject, the insane may have accomplices and abettors; some sane, some insane. Freeman, of Pocasset, Mass., was a paranoiac; his wife was an ill-balanced woman, but aiding and abetting them were, as Dr. Folsom¶ has shown, sane Second Adventist fanatics. In Sandwich, Ill.,** a sane father and his paranoic son abetted an insane mother in what proved to be a fatal forty-day fast preparatory to the immaculate delivery of a new Christ. The paranoiac son gave inventively stupid "spiritual" reasons why an autopsy disproved the existence of pregnancy.

Ball has not put the case too strongly, however, when he says that the sane of mediocre mental calibre are much more apt to accept the delusions of the insane than their fellows.

*Internl. Med. Mag., Mch., 1893.

†Ann. Medico-Psych. t. VII s. x.

‡Maladies Mentales.

§Psychologie des Fonles.

||Insanity and Allied Neuroses.

¶Boston Medical and Surgical Journal, 1879.

**American Journal of Neur. and Psych., III.

More than one lunatic recognized as insane by his fellow patients has been released as sane by a "sane" jury on the testimony of "sane experts" to demonstrate his "sanity" by a brutal, uncalled-for homicide. How far this influence of the insane on the sane extends has been shown in more than one revolution or religious sect. As Lombroso has shown, Marat, Billaud, Lebon, and Carrier were degenerate lunatics who, aided by Burke's attempt to create a "White Terror," by Marie Antoinette's inventively stupid mendacity, and by the selfish partition schemes of Austria and Prussia, were able to impose their suspicious delusions on the French people and produce the undue severities of the "Red Terror." Masaniello was, as Sir Walter Scott† has shown, a paranoiac who, aided by very similar conditions to those just described, became the head of the Neapolitan revolution. Rienzi was also, as Lombroso‡ has proven, a paranoiac, guilty, when a ruler of Rome after his successful revolution, of a thousand insane inconsistencies. The paranoiac Julia de Krudener was strongly potential in forming the "Holy Alliance" against Napoleon I. The paranoiac Joan of Arc§ broke the spell of terror England had cast over France. The paranoiac Louis Reill|| nearly shook off Canadian rule over the Indian of the Northwest.

John of Leyden, Muggleton, Naylor, and Johanna Southcote were paranoiaks able to impose their delusions of divinity, of prophetship, or of divine maternity on numerous followers, and thus establish religious sects. The pseudocyesis of Johanna Southcote, which recalls that of Mrs. Lay, was accepted as pregnancy with Christ, by numerous devotees, whose faith in this "pregnancy" endured, albeit it was "protracted" for years. Religion and revolutions are sufficiently out of the common to be accepted as predisposing to insane delusions. In finance the same story is told. Clouston¶ had under his care a paranoiac who was able to impose his delusion, anent the "elixir of life," on sane people, and sell them the same while on parole from the insane hospital. That

*Criminal Man.

†Essays; Masaniello.

‡Ireland, Blot on the Brain.

§Man of Genius.

||Ireland, Through the Ivory Gate.

¶Mental Diseases.

Patterson, the "Darien Schemer," was a paranoiac, Macaulay's* account leaves no doubt. His "Darien Scheme" ruined half Scotland. One case forensically analyzed by Liman† illustrates the origin of certain sexual anomalies in religious sects.

CASE XV.—A forty-nine-year-old man charged with incest was examined by him. The man's wife who made the complaint, gave details which left no doubt that the man was a religious paranoiac. Liman found that he had hallucinations and delusions. It was divinely revealed to him that from intercourse with his daughter would spring the everlasting son, who would free his family from sin. This divine command he obeyed. The daughter was a well-built, very stupid, nineteen-year old girl, who had not realized her father's mental state, and had been the tool of a lunatic.

The leader of a recent Wisconsin lynching was a paranoiac and he and two epileptic aids were adjudicated insane. The much-boasted civilization of the United States has afforded more than four instances during the last decade in which sane Americans worshiped paranoiacs as deities.

Arrago Tamassia‡ claims that there is "an undue tendency in Continental Europe to under value simulation as a test of sanity. A paradoxical dictum of Vingtriniers, that he who simulates insanity, if he be not insane, is on the point of becoming so, has been received with the utmost deference by alienists. To affirm that simulation of insanity by itself creates suspicion of mental integrity, contradicts the daily data of forensic practice."

Judging from the number of chronic lunatics sent to penitentiaries on the continent of Europe, simulation of insanity is rare as a defence for crime. Regis§ indicates that this is true of France. It is evident from an analysis of reported cases that detection of simulation is not positive evidence that insanity is feigned. Only the dilettante or dishonest alienist could claim this. The physician who studies his cases carefully will not admit that the simulation of certain symp-

*History, vol. v. p. 341.

†Verteljahrschrift f. Gerichtl. Med., B, xxxiii.

‡Alienist and Neurologist, Oct. 1892.

§Mental Medicine, Bannister's Translation, p. 665.

toms is sufficient to disprove the existence of other pathognomonic symptoms of insanity present in the patient.

This test of sanity is an old one yet its fallacious nature was evident even to laymen in the sixteenth century. Ray* discussing the alleged simulation in 'Hamlet' remarks:

"In this scene he adjures his friends if they see him bearing himself however strange or odd, as he might, perchance think meet to put an antic disposition on, never to let drop the slightest intimation of his design. This remark, on which the theory of Hamlet's insanity being feigned is mainly founded, indicates at most an indefinite half-formed resolve to accomplish a purpose by simulating a disease that was already overshadowing his spirit in all its fearful reality." This spectacle of the insane feigning insanity was a common popular spectacle in the 16th and 17th centuries, for Shakespeare again employs it in "Lear." Edgar about to feign insanity remarks:

Whiles I may escape, I will preserve myself; and am bethought
To take the basest and most poorest shape
That ever penury in contempt of man
Brought near to beast: my face I grime with filth,
Blanket my loins, elf all my hair in knots;
And with presented nakedness out-face
The winds and persecutions of the sky.
The country gives me proof and precedent
Of bedlam beggars who, with roaring voices,
Strike in their numbed and mortified bare arms,
Pins, wooden pricks, nails, sprigs of rosemary
And with this horrible object, from low farms,
Poor pelting villages, sheep-cotes and mills,
Sometime with lunatic bans, sometime with prayers, enforce their charities.

Feigning of insanity by the insane, at the time Shakespeare wrote, was a familiar street sight. Bethlem† was a contracted and penurious charity with more patients than funds.

The governors were in the habit of relieving the establishment by discharging patients whose recovery was very equivocal.‡ These discharged patients, thrown upon the world without a friend, wandered about the country chanting wild ditties and wearing a fantastical dress to attract the notice of the charitable.

Simulation in a case of criminal accusation, however, long continued to be regarded as proof positive of sanity. On the continent of Europe the lack of value of this test was early

*Mental Pathology.

†Curiosities of Literature.

‡Bucknill "Mad Folk of Shakespeare."

recognized. Delasiauve*, Stark†, Ingels‡, Pelman§ and Laurent|| all cite cases in which lunatics feigned insanity to escape punishment.

Dr. Dagonet has reported the following case:

CASE XVI.—A lunatic feigned insanity to secure admission to an insane hospital for an insane purpose of delusional origin.||

Lahr¶ had observed the case of a patient of markedly defective heredity who committed a sexual crime. He shammed a form of insanity which he had not, and the real insanity came out after the sham was exposed. Ray**, as shown already, had noticed this feigning of insanity by the insane. In discussing the case of the homicide, Trimbur, he remarks;

“The criminal classes to which most of these simulators belong, know as well as any one else that the plea of insanity is one of the dodges whereby people now escape the punishment of their crimes, and they may not forget to act accordingly when they are insane. Trimbur being unconscious of his real insanity, but with mind enough to understand his situation, and to remember what he had heard about insanity in connection with crime, concluded to make a show of being crazy.”

Dr. C. H. Hughes††, in the first systematic American article on the subject, remarks:

“The insane appear at times, when they have an object to accomplish more crazy than, and different from, what they really are; this is the sense in which we use the term simulation, and this condition is akin to that of feigning by the sane. Simulation, while it presupposes a degree of intelligence, does not require that the patient should be wholly sound in mind, and it might be attempted by a convalescent patient not thoroughly recovered, desirous of remaining longer in the hospital, or for some other cause.” He then cited several demonstrative cases.

**Jour. de Med. Ment.* 1868.

†*Allg. Ztschaft f. Psych.* 1870.

‡*Ibid* 1872. *Irrenfreund* 1874.

§*Etude Medico-Legale sur la Simulation.*

||*Jour. de Med. Ment.* 1868.

¶*Arch. f. Psych. B. I.*

***Amer. Journal Ins.* 1874.

††*Alienist and Neurologist*, 1883.

This paper was read before Section X, on Mental Diseases, of the International Congress of 1876 and after corroborative discussions by Drs. I. Ray, J. P. Gray, W. Kempster, Nichols, Kirkbride and others, the section unanimously resolved:

"It is not only not impossible for the insane to simulate insanity for any purpose, in any but its gravest forms of profound general mental involvement, but they actually do simulate acts and forms of insanity, for which there exists no pathological warrant that we can discover in the real disease affecting them."*

Dr. Workman,† of Toronto, has observed the following case:

CASE XVII.—An insane man who escaped from the insane hospital under Dr. Workman's charge and killed his wife during an insane fit of jealousy; the man professed to the doctor to be completely amnesic while under trial for murder, denied that he had ever been under the doctor's charge, or that he knew anything about the asylum. The doctor stated to the jury that the man was both simulating insanity and was insane. The prisoner was acquitted, and sent to the Criminal Lunatic Asylum, at Kingston, Canada. The doctor saw him there two years subsequently. He then fully recognized the doctor, and, in answer to a question, said that "he did not want to know the doctor" when previously examined by him. Had he been sane, he would, as Dr. Workman suggests, have known that sufficient proof of his past insanity could have been produced, and he would have abstained from his clumsy simulation, or he would have acted more cleverly.

Dr. E. C. Spitzka‡ has reported a case in which a criminal lunatic with degeneracy stigmata feigned a psychosis with religious delusions. He also states that a lunatic who killed a woman under persecutory delusions and was acquitted of murder, feigned amnesia.

Dr. C. H. Nichols§ has reported the following case:

CASE XVIII.—A man committed murder under, as he believed, the command of the Virgin Mary, who appeared to

*Transactions of the Congress.

† *Alienist and Neurologist*, 1883.

‡ *Jour. of Nerv. and Mental Dis.*, 1877.

§ *Chicago Medical Review*, Vol. III, 1881.

him in the flame of a candle. Two young lawyers were assigned as his counsel; they advised him to feign insanity, which he did, under the form of dementia. The experts, Drs. Nichols and Ranney, detected both the sham and the real insanity, and had him sent to an asylum, where his insanity became unmistakable.

Dr. J. P. Gray, in 1876 report of the Utica Insane Hospital, narrates the following case;

CASE XIX.—A man two or three days before being admitted, was met in the woods going towards his father's, carrying a gun, and said he was "going to shoot the old man." When admitted, he said he "had been out of his head for quite a while; should think twenty-four hours."

Dr. C. B. Burr, of Flint*, Mich. described the case of a paranoiac who feigned insanity as a basis for a pension.

Dr. J. H. McBride† has reported a case in which a female paranoiac feigned insanity for a purpose. Marandan de Monteyel‡ reports the following case:

CASE XX.—A woman killed her illegitimate child. She was a paranoic but feigned dementia preceeded by hallucinations and attended by irregular amnesia. She was quiet one night after having been extremely noisy the night previous. Her insanity having been demonstrated she was sent to an insane hospital where her real mental condition became apparent.

About a dozen years ago, in the second systematic American paper§ on the subject, I pointed out that the insane could and did feign insanity for a purpose and cited in illustration the following cases;

CASE XXI.—The patient had been for a long time a pauper, and was somewhat demented. He had at times hallucinations of hearing, but complained continually about having tar and grease in his head, and says he is insane in consequence. He says but little on the subject, except to the physician, and for a long time refused to work, as being insane and having tar and grease in his head. He found that his statement of being insane and having tar and grease in his head drew the attention of visitors toward him, and lead to his receiving to-

**Amer. Jour. Med. Sc.* Jan. 1883.

†*Alienist and Neurologist*, 1883.

‡*L'Encephale*, 1882.

§*Alienist and Neurologist*, 1882.

bacco. He is therefore markedly obtrusive with these statements when in the presence of visitors. He denies that he has hallucinations and these can be drawn from him only after prolonged questioning. The contrast between his concealment of his real insanity, and the obtrusive manner in which he manifests his assumed delusions is very marked.

CASE XXII was a hebephreniac who displayed all the self-importance of that psychosis, but who found that a case of monomania attracted much more attention than he did, simply because the latter claimed to have written several of Shakespeare's tragedies; whereupon he claimed to have written "all of Byron, all of Shelley and all of Milton." A simple cross-examination showed this claim to be a feigned one, and this patient not infrequently so admitted to the physician, but kept up making the claim to visitors, although he refrained from so doing to the physicians themselves.

CASE XXIII was a victim of acquired secondary paranoia who plunged every morning into the river for a bath, breaking the ice if necessary to secure it. This man found that by feigning dementia he was able to secure tobacco and other little comforts, and he therefore kept this up on occasion, relapsing into his usual condition when his end was attained.

The secondary incoherent lunatics often furnish instances of simulation of insane which puzzle the alienist who fails to recognize that, as Dr. Crichton Browne* remarks, the perceptive faculties are often as active as ever. Things going on around them are noticed. The patient apprehends very quickly, and as a rule, despite his incoherence, is often a very useful inmate of the asylum. One patient of mine was an excellent shoemaker, and the fact that he was not able to put together three coherent sentences did not interfere with his good cobbling and shoemaking. As Crichton Brown remarks, these patients are quick to recognize, classify and name the persons brought before them. One of these patients, whose only coherent sentence was, "Isn't that so," was able to render very valuable assistance in gardening, being much interested in his work. He acted so intelligently about this that an attendant whom he had worked with for a day without much speaking was astonished to find how incoherent he was and thought he was feigning. This psychosis is not necessarily attended with mental confusion or loss of memory. Crichton Brown well says: "These patients have

* West Riding Lunat. Asylum Reports, Vol. V. 1875.

lost control over their mental processes. They cannot pursue any train of thought. They can no longer regulate the inner life which itself is out of accord with the external environment. The patients are not so much weak as wild minded. They are not so much fatuous as fantastic. The proud and compact phalanx of intellect is almost unthinned but it is converted into an unruly mob. The steady tread of rational progression is possible for a moment but has given place for the most part to the hurried shuffling and confused scrambling of mental tumult. Their minds are active but the activity is morbid. The majority of the patients laugh very much. They have an exaggerated sense of the ludicrous. They are very loquacious as a rule. They are capable of extended application provided this application be directed by an intelligent attendant or be of an absorbing nature.

This intellectual peculiarity leads the idle patient of this type to much mischief and not infrequently to simulation to conceal the mischief as in the following case:

CASE XXIV.—An incoherent chronic patient allowed out on parole had been permitted the freedom of their orchards by many farmers to whom he rendered some service by assisting therein. Occasionally he wandered out of his usual territory, took the same liberties with strangers who resented this, whereupon the quiet man became transformed in a second into an apparently raving lunatic. A posse armed with pitchforks would then convey the “dangerous” lunatic back to the insane hospital. On one occasion my little girl with whom the patient was a great favorite met such a posse with this “dangerous” lunatic in charge. To their horror she ran into his arms, scolded them for hurting him and the “dangerous” seemingly violent maniac vanished to give place to a mild mannered genial individual who ran with the child on his shoulder in great glee to the insane hospital. His captors had previously had to drag him every single step toward the institution. He was conveyed to Kankakee with 150 others in a car. Apple venders crowded around this at one stopping place on the journey. The patient opened the window and held out a round piece of tin the size of a dime. The apple-

vender handed up a dimes-worth of apples. When these were safe in the car the patient howled maniacally and made fearful grimaces, whereat the apple vendor fled in terror whereupon the "raving maniac" laughed uproariously and during the rest of the journey was in evident incoherent jubilation over the results of his stratagem.

The following case I was enabled to study in 1882 through the courtesy of the Bridewell officials:

CASE XXV.—A supposedly harmless hebephreniac was confined awaiting trial for insanity in the Chicago Bridewell in the same cell and bed with a surly one-legged man who forced the hebephreniac to lie on the floor. The hebephreniac waited till the cripple was asleep and then killed the latter with his own wooden leg. The turnkey in the morning when attempting to enter the cell met the hebephreniac who assured him all was right. The cripple was found dead. The stump had been cleaned off with a rag and in the bucket were hidden blood-stained bed-clothing. The hebephreniac replied to all questions anent the killing with mere looks, vacuous and demented. Subsequently he denied that he killed any one, or that he had ever seen a dead man. As to the blood which disfigured his hands and face, he said that his nose had bled during the night. He was a tall, slim boy, twenty years old, pale-faced and light-haired. His face had the aimless expression of a dolt except for an occasional gleam of cunning, which furnished ground for the belief that he was not so insane as he looked. Insane he was certainly, but the story of the bleeding nose and the unwillingness to talk were evidence that the boy had at least a partial conception of the enormity of his crime and of the expediency of feigning insanity. That he was insane and feigning insanity was clearly evident to even the newspaper reporters and to the jury who subsequently tried and found him insane.

(To be continued.)

Observations on the Histological Development of the Cerebellar Cortex.*

IN RELATION TO LOCOMOTION.

Prefatory Note by DR. AURELIO LUI, Brescia Provincial Asylum.

In Prof. Stefani's Laboratory, during the past year, I have been examining histogenetically, the strata of the cerebellar cortex in some mammals and birds and have been able to establish this important fact, that the complete development of the cerebellum was attained in them at that period in which they respectively were able to assume the upright attitude and to walk; and that the different developments at the time of birth and in the succeeding periods advanced *pari passu* with the more or less early dates at which such attitudes were assumed.

These conclusions were reached after observing the cerebellum of the chicken, which walks as soon as born, and those of young sheep, of dogs and doves, which walk at varying periods after birth.

Nuclear stains were almost exclusively used, and with these I was able to determine that the modifications by which the cerebellum attains its complete development consist in a gradual disappearance of the external granular layer, in a constant increase of molecular substance and in a change in the cells of Purkinje, which, from being pyramidal in shape, become approximately globular owing to an increase in their protoplasm and a change in the position of the nucleus, which tends to become centralized, or to occupy a position in the upper part of the cell.

* Translated by Susanna P. Boyle, M. D. C. M., Lecturer and Demonstrator in Normal and Pathological Histology, Toronto Woman's Medical College. Physician to Girls' Home, Toronto.

Moreover it was interesting to observe analogous occurrences in other mammals and in birds, and to note besides, those peculiar structural changes which could be most clearly followed in the elements constituting the cerebellar cortex, and to ascertain what was the significance and ultimate fate of the external granular layer.

In these recent investigations Golgi's rapid black stain (fixation of sections in osmio-bichromic solution, and subsequent impregnation with silver nitrate) was almost entirely used as being that which most effectively stains the nervous tissues of new-born animals, especially if care be taken, when treating such structures in this way, not to leave them too long in the mixture; sixteen or eighteen hours being generally quite sufficient to obtain a good reduction afterwards.

Rabbits, rats and cats afforded material for the researches on mammals; studies at the time of birth being followed later by others undertaken in connection with animals that had learned to walk. In birds, besides repeating all the researches on chickens which walk at birth, investigations were carried on, in a similar way, with sparrows and starlings, both of which do not acquire the habit till later.

Examinations of sections hardened in Flemming's fluid and stained with safranin, acid fuchsin, etc., gave similar results to those obtained in the preceding investigations. This was especially satisfactory in the case of the cerebella of birds, the small size of which had rendered the previous researches somewhat defective.

The black reaction method, in the cerebellum of the chick, showed at the outer edge of the molecular substance, a sharply marked strip, corresponding to the small amount of the external granular layer which still remained.

Owing to the difficulty of obtaining a good reduction, I have been able to observe in this granular layer only the so-called radial fibres of the neuroglia cells situated on a level with or a little lower than the bodies of the cells of Purkinje, with their terminal plates on the free surface of the cerebellum, some small neuroglia cells, some prolonga-

tions of the stellate cells of the molecular layer, those of the internal granular stratum, and some elements of rounded form, analogous to those described by Retinz, Ramon y Cajal, Kolliker and others in the external granular layer. The molecular substance was shown completely developed. We observed also the cells of Purkinje, globular in form and provided with protoplasmic processes which were widely spread and extended to the internal boundary of the thin strip of external granules. They are not, as is generally stated, incompletely developed in newly-born or very young animals, (see Gehuchten and others) but have reached, what may be called, their normal development.

In fact the body of the cell is not flattened in form, they have not large cylinders with collateral horns of great thickness, nor serrated protoplasmic processes provided with those large spines, which are found in embryo cerebella, but are diffusely and widely extended and provided often with a fine dentation which is frequently met with in the same elements of the adult cerebellum.

Besides partaking of the adult type in this respect, they possess also all the rest of the molecular and internal granular layers. Here are shown most clearly, not only the various ganglionic elements, but also that complicated plexus of fibrils which is to be seen in the adult cerebellum, to some peculiarities of which we shall make further reference in our complete work.

In the internal granular zone, where, with the method followed in the preceding researches, I was unable to discover any differential characteristic by which to distinguish between the embryonic state and that of complete development, I could not find, in the chick, by Golgi's method, anything which could be described as an embryonic nature.

The large cells of Golgi, especially, show no difference of any kind; they are for the most part polyhedral or vertically elongated in shape and provided with a finely-branching nerve process, and are not, as stated by Ramon y Cajal and others, larger than in the fully developed organ. The nerve-fibres possess only to a limited extent that varicosity which the black stain shows so satisfactorily in the

cerebellum of a newly-born animal. These varicosities are present also in processes from embryonic nerve cells and neuroglia, but here are entirely absent. In my opinion the absence of this characteristic, peculiar to the embryonic nervous elements in the cerebella of the newly-born, is very significant, especially when we consider that in other animals it is found for some time after birth.

The cerebellum of the sparrow and that of the starling, on the other hand, have, at birth, all the characteristics of an embryo organ. Carmine preparations show but slight development of the molecular substance and a large amount of external granular layer. In this latter we found very well brought out by the black stain, some rounded elements of varied diameters, provided with short processes, turned either toward the base or apex, and reunited with each other especially in the more external portions; of these some probably represent only the flattened extremity of the radial fibres of the large neuroglia cells, others the large round or oval varicosities of the processes of such neuroglia cells, which varicosities sometimes proceed very near to them and follow for a long distance one of these processes except in those cases where the direction of the cut has left them isolated or with short peduncles. Besides this there are found in the deeper parts of this stratum, either arranged parallel to, or at right angles with the convolutions, some cellular bodies provided with two processes which leave opposite ends of the cell; the horizontal bodies are more developed than the others, have a more decidedly cellular appearance and less branching of the processes. We cannot say whether or not these processes of nerve cells extend into this layer from the subjacent stratum of nerve fibres. In the molecular substance there may be seen a slender fibrillar layer; very rarely are nerve cells found in this part, if we do not count those elements just described in the deeper parts of the granular layer, in which are effected the progressive structural modifications. The body of the cells of Purkinje is described as being rough and covered with tufts of short, coarse protoplasmic processes provided with large spines and they do not extend past the inferior boundary of the external granular zone. In the

internal granular stratum are found some cellular elements and very often nerve fibres possessing large and numerous varicosities throughout their entire course.

During development the granular layer slowly diminishes and in its place comes the molecular substance with its abundant cellular formation and its rich web of fibres and their processes.

There is not room here to speak of some peculiarities in structure of the sparrow's brain; it is sufficient to say that, placed a little above the cells of Purkinje, there exist some special cells with bodies of different shapes globularly polyhedral, or beautifully pyramidal, from the base of which goes a nerve process, which either subdivides at once or proceeds for some distance undivided into the next layer, while from the opposite end of the cell there arises a rich arborization of protoplasmic prolongations which intertwining with those of Purkinje's cells, reach to the periphery.

Research on mammals only tended to confirm the coincidence between the definite development of the cerebellar cortex and the manifestation of locomotive phenomena.

The cerebellum of rabbits, cats, rats and dogs at the time of birth is very similar in its state of immaturity to that of sparrows. The subsequent evolution is accomplished more or less rapidly; and, without wishing to deny that there exist differences of certain degree in the morphological constitution of the cerebellar cortex in these different animals, I do desire to say that, after an accurate examination of numerous preparations, I am convinced that many of the differences which have been noted, have their foundation in the different ages at which the animals have been studied, even though all the researches have been conducted on very young animals.

The best reductions of the external embryonic stratum of granules and of the molecular substance are obtained from the new-born rat, and those of the internal granular layer in the cat immediately at, and also for some days after birth. The granular stratum offers for consideration a structure analogous to that described in the swallow, excepting that some of the above-mentioned horizontal bi-polar cells situ-

ated at the internal limit of this zone, resemble more closely in the shape of the body and course of processes, those cells with long horizontal prolongations which are met with in the adult. Purkinji's cell is represented by an irregular body covered with short and irregular protoplasmic processes; the nerve prolongations can be followed very easily, appearing however, larger, less flexuous and uniform than those of adult cells. It is worthy of note that the internal granular stratum, in all else almost analogous to that of birds, has already at birth almost attained its full development.

There may be noted as embryonic characteristics, varicosity of the fibres and processes, and greater size and irregularity of the cell-bodies, granules as well as the large nerve and neuroglia cells, but the complex structure of this zone is already most apparent. Gradually as the time of ambulation approaches the various strata become progressively modified and reach their complete development when that epoch is entirely accomplished.

In the plates accompanying the forthcoming work these various morphological phenomena will be clearly demonstrated.

At present it is sufficient to sum up with the following facts, viz.;

1. That in many other mammals also the cerebellar cortex reaches its complete development coincidentally with the development of the upright attitude and art of walking; that in birds, which walk as soon as born, the cortex is at birth in possession of its complete development, while in others such a form is attained at a period after birth, corresponding to that at which the above mentioned phenomena manifest themselves.

2. That the modes of development of the single elements are very complex.

It seems evident that the external granular layer is only an embryonic stage of the molecular substance, for the greater part of the elements which are found in it have not the appearance of nervous tissues and in some of them the neuroglia nature can be demonstrated; it is only in the zone bordering on the molecular substance and which we may consider part of the same stratum, that we may dis-

tinguish in the embryo, some cells which have a certain amount of resemblance to the nerve cells found there in the adult organ. Karyokinetic figures may here be demonstrated satisfactorily by Bizzozero's method, or with the aid of saffranin. It is probable that owing to the multiplication of these cells, the increase in the fibrillar plexus of the molecular zone and the rich development of the cells of Purkinje, this stratum is compelled to undergo a process of slow atrophy.

3. That the elements which gradually develop with such regularity, as the animal begins to assume the walking attitude, are the cells of Purkinje and those cells which are found in the deeper parts of the external granular zone; these cells therefore have the significance of motor cells and those which, at least in part, according to some authors, represent a system of association by the aid of their processes which extend among the ganglionic elements. The internal stratum of granules, on the other hand, shows an advanced degree of development at birth, whether or not the animal be then endowed with the faculty of walking.

When the addition of some other researches will permit me to publish in an extended form, the results of my observations I shall describe more minutely the structural changes in the cortex during its period of development and some other particulars which appear to me worthy of consideration.

Physiological and Therapeutic Researches on the Pseudohyoscyamine of Merck.*

By Doctor GIUSEPPE GUICCIARDI.

PSEUDOHYOSCYAMINE is an entirely new substance, both to chemical analysis and physiological or therapeutic experiment. It is a powerful alkaloid, belonging to the group of poisonous mydriatics, whose prototype is atropine.

Merck, who discovered it recently, has studied it from a chemical point of view. On my own part I have made some physiological and therapeutic experiments, especially in the psychoses; at the Psychiatric Institute of Reggio-Emilia. I have compared its action with that of other substances analogous in composition and of known chemical constitution. Merck has isolated the new alkaloid from *Duboisia myoporoides*, a plant of the family of the Solanaceae. The new alkaloid is not identical with any of the bases actually known and obtained from the Solanaceae, such as atropine, daturine, hyoscyamine, hyoscyne and duboisine. By reason of its polarimetric properties, it has already been called by Merck, the awkward and inelegant name of pseudohyoscyamine, pseudohyoscyamine is isolated by repeated crystallization from hyoscyamine and hyoscyne. It becomes separated from chloroform by the addition of a large quantity of ether and is then deposited as small, feebly, yellow crystals. These crystals are soluble with difficulty in water and ether; but easily in chloroform and alcohol. They have a sinistral polarimetric deviation of 0.897° . It may be heated to 133° - 134°C . without decomposition. It has therefore a fusion point different from other vegetable bases derived from the solanaceae; such as atropine fusing at 115° , hyoscyamine at 106° and apoatropine at 60 - 62°C .

*Translated from the Italian by Dr. Arthur E. Mink, St. Louis.

The formula of the alkaloid is $C_{17}H_{23}NO$ and is similar to that of atropine and hyoscyamine. But pseudohyoscyamine is distinguished from atropine and hyoscyamine in this; that after decomposition by treatment with barium hydrate, we have neither tropine nor pseudotropine; but a base isomeric with these present as reddish-yellow crystals, indecomposable, except at a fusing point of 250° . No simple salts have yet been made from pseudohyoscyamine, as has been done with the other mydriatic alkaloids lately discovered; such as hyoscine hydrochlorate and hydrobromate, and duboisine sulphate. Having received the substance directly from Merck, I have employed in my experiments, either a 2% aqueous solution, a 1% solution in alcohol and water, for experiment on animals, or a 1-600 solution as a collyrium. Such solutions are limpid, have an alkaline reaction and a pronounced bitter sweetish taste. *Physiological and Therapeutic facts:* I report in a cursory manner the most important conclusions of my researches, reserving the right in a future communication of completing and strengthening them, by a detailed exposition of the clinical and physiological experiments. I have used the alkaloid as a collyrium in order to see its action upon the pupil, when applied directly; and also as a subcutaneous injection in animals and man. In man the injection always produces a circumscribed turgor and intense redness, in the region of puncture, which is felt subjectively as a painful tension of the part along with a scorching feeling. To the touch, the skin at this point is quite warm. Such phenomena disappear very slowly; but have no other consequence, such as persistent induration or production of abscesses. Still the injection of duboisine amongst others, is sufficiently painful. It is to be noted, however, both in the case of duboisine and pseudohyoscyamine, that the patient after a little, no longer notices the local symptoms of the puncture owing to the torpor which overcomes him.

The dose in which we can employ pseudohyoscyamine without producing grave toxic phenomena, we have always found stands in a certain relation to the development of the brain. Herbivorous animals (rabbit and guinea pigs) bear the poison much better than carnivora (dog),; perhaps

because among the first, elimination is accomplished more rapidly, as I have already found it happen with atropine. The guinea pig and rabbit bear doses of 7 to 8 centigrammes best, injected at once or at short intervals; only showing symptoms of torpor and somnolence. For dogs the dose is from 2 to 4 centigrammes.

In man it happens that idiots and dements resist the effects of the alkaloid in a very sensible manner; even in doses of 5-6 milligrammes. In a young and robust idiot, 8 milligrammes produced no pronounced effects. Other insane show these effects with doses of 2 to 3 milligrammes, and the very excitable and intelligent, with doses of from 6-7 decimilligrammes up to 1 milligramme.

The absorption is most rapid subcutaneously, much more so than that of duboisine or atropine. In fact the modification of the pulse (which is a valuable criterion of the action of poison) was influenced by doses of 2 milligrammes; one minute after injection, of duboisine sulphate from 3 to 4 minutes after, by atropine sulphate from 8 to 10 minutes after. I was anxious to know the maximum of action and cessation; thus with doses of 2 milligrammes, the maximum action of pseudohyoscyamine is reached after 15-18 minutes, by duboisine and atropine between 25-30 minutes. After 2 hours the effects of pseudohyoscyamine are no longer manifested by the pulse; with atropine, after 2 hours and 20 minutes; while two hours and a half after the injection of duboisine the effect is still most pronounced on the pulse. Following the introduction of rather large doses, the concomitant disturbances of the skin and digestive organs are much less than those attending the use of atropine and often with the use of relatively large doses of duboisine. The face is a little flushed, skin slightly dry and there is some dryness of the mouth and pharynx, but no nausea nor vomiting. With small doses the number of respirations is augmented notably, with large doses they are diminished more or less; especially at the acme of drug action. When drug action diminishes they deepen. The pupil becomes only moderately dilated when pseudohyoscyamine is injected subcutaneously in comparison with that produced by duboisine

and especially atropine. Analogous results are obtained when it is locally applied. Small doses produce more or less generalized muscular contraction, and an apparent augmentation of reflex excitability. These phenomena are notably diminished when the dose is discreetly augmented. The action of the alkaloid on the vagus and circulation is typical of atropine.

At first there is a temporary slowing of the pulse and then an enormous acceleration.

We have constructed a graphic table, which will demonstrate this, and at the same time permit us to compare the action of equal doses on the same subject, under identical conditions, of pseudohyoscyamine in comparison with sulphate of atropine. The action of pseudohyoscyamine appears quicker and is more moderate, and less lasting than that of atropine, much more, of duboisine. Along with acceleration of the pulse there is elevation of blood pressure, but not so intense as with atropine. The intermittance of the pulse is rarely found in comparison with that resulting from the use of atropine and especially duboisine. Numerous sphygmographic tracings taken before and after injection of larger or smaller doses of pseudohyoscyamine (5-6 milligrammes) on normal, hysterical, maniacal, and idiotic subjects, will clearly prove all this.

Four of the tracings I give of a hysteric under the action of a milligram and a half of the alkaloid, will show very well the facts here quoted, and I report such tracings here as an example of what commonly occurs. We have also taken the curves of the number of heart beats on the whole and decapitated frog, after which we injected 2 decimilligrammes of pseudohyoscyamine. One of the tracings taken from a more succesful experiment, will demonstrate the elective action of the alkaloid on the encephalic centres.

The general phenomena of pseudohyoscyamine are similar to those of atropine, but less disagreeable than to those of duboisine, but less intense and more fleeting. A small dose gives a sense of exhilaration, stronger ones produce weakness, the feeling of inertia, torpor, partial arrest of ideation, abulia, somnolence and rarely sleep. These phenomena resemble those of alcoholic intoxication. A col-

Fig. 1.

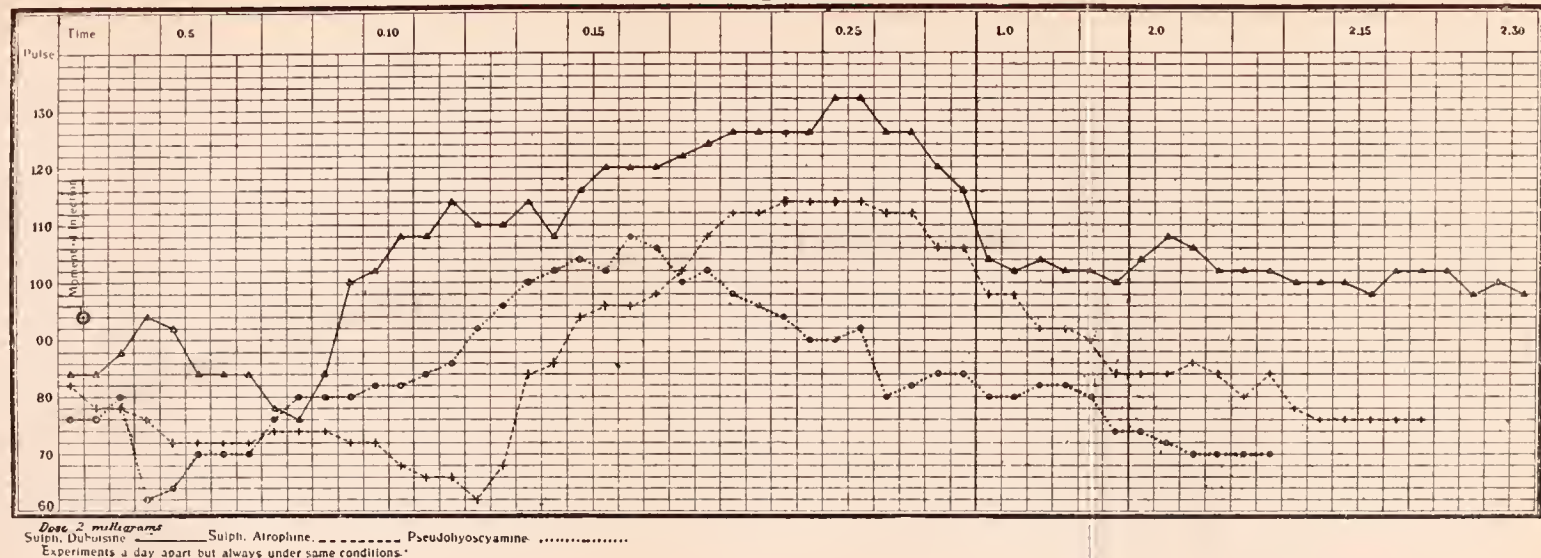


Fig. 2.

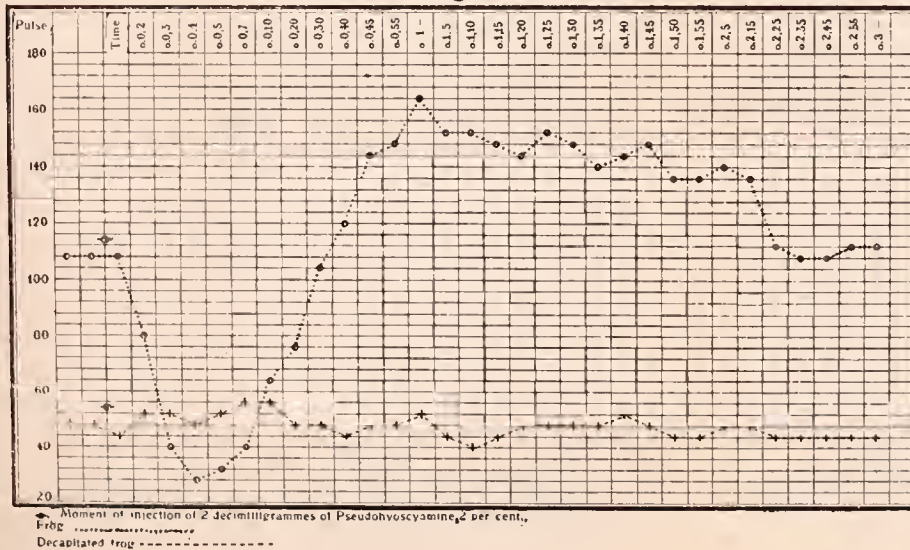
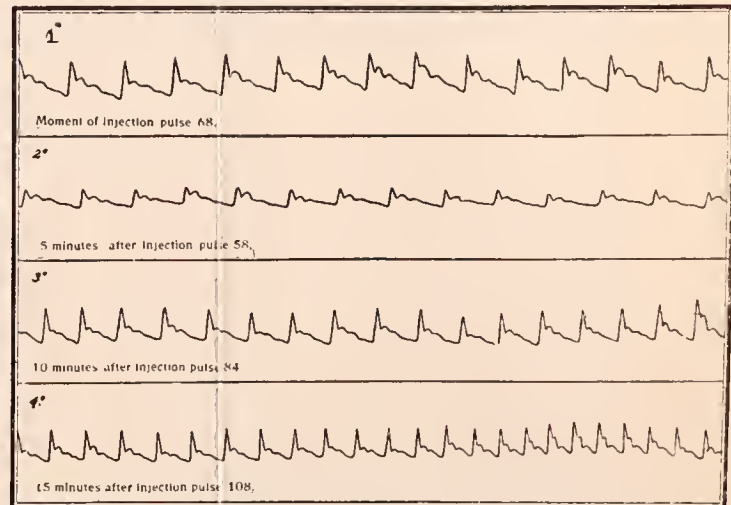


Fig. 3. - M. A. (Hystero-epilepsy.

Injection of three milligrammes Pseudohyoscyamine.





league of mine, after the injection of 4 decimilligrammes, was affected with weakness—the need of being seated, was taciturn, yawning, with heaviness in the head, the legs gave way, involuntary contraction of the muscles, a dryness in the mouth, with difficulty in swallowing. Three hours after he recovered, and only appeared to be somewhat unstrung and fatigued.

In the insane, I have so far used the drug in only selected cases. I have used it with the special intent of modifying the psychomotor excitement of mania, of certain forms of imbecility, and of hysteria; in hysteria especially to cut short or lessen the convulsive attack. Inasmuch as its hypnotic power is very uncertain, it should never be given with this intent, like duboisine. There is a better use for it. I can say nothing of the curative effect of the alkaloid: but as a sedative I can affirm that it succeeds very well, possessing an action analogous to that which Belmondo found in duboisine when experimenting in this Institute. In comparison with duboisine it has, as far as I can determine, some advantages and not a few defects. Puncture is more painful with pseudohyoscyamine, the action less lasting, the effects less prominent and sure, but it is more rapid and fulminating in its action and its effects as rapidly cease—two things which will make it useful in therapeutics, especially for modifying hysterical convulsions, where I have used it in some cases with great advantage. It is more convenient in dose, because less dangerous and infinitely less toxic, and it can be longer used, because of its more moderate action on the heart.

Bilateral Paralysis of the Facial Nerve.*

By DR. MONJUSHKO, Russia.

CASE 1. (Conclusion).—The irritability of the nerves and muscles to the faradic current is destroyed (Normal apparatus of Krueger). With a distance of 50 mm between the electrodes, the corrugator supercilli frontalis, sphincter palpebrarum, levator labii sup., zygomatici and depressor anguli oris muscles did not contract. These currents caused only intense pain in the face.

On testing the nerves with the constant current, no reaction could be observed (Stoerers apparatus with 24 cells). On examination of the muscles with this current, the spincter palpebrarum, levator labii sup., zygomatici, depressor anguli oris et depressor menti muscles contracted considerably with 6 cells, reacting more however on the application of the Ka than the An—KaSZ > An. SZ. These contractions were slow.

The sense of taste in the anterior two-thirds of the tongue on its application with proper solutions is considerably diminished and slow, so that he is able to determine the kind of taste only after a few seconds and then in most instances incorrectly. He mixes sour (weak solution of muriatic or citric acid) with salty. Strong salty, sweet or even bitter solutions, he is better able to differentiate. On the right half of the tongue the sense of taste is worse. If sugar or salt be applied to his tongue in powder form, he cannot feel them at all, unless he swallows some particles.

The patient complains of noise in his ears, but nothing points to a weakening of his sense of hearing. Dr. Heyman, the superintendent of the aural department, pronounced the organs of hearing, after a careful examination, entirely normal.

For completeness of the examination of the cranial nerves I must add that his sight and the motion of his eyeballs were entirely normal. The tactile sensibility of the face,

*Translated from the Russian for the ALIENIST and NEUROLOGIST by Dr. Gustavus Blech, St. Louis, Mo.

the walls of the mouth and the tongue are well preserved. (V. p.) Sometimes the patient observed that the right-half of his tongue felt worse; the motion of the tongue being free, no atrophy and no trembling in the latter could be observed.

Thus we have before us a bilateral paralysis of the facial nerves with a weakening of the sense of taste and a subjective derangement of hearing, in consequence of the affection of both nerves in the Fallopian canal between the ganglion geniculatum and the exit of the nervus stapedius (according to Erb's schedule No, 5).

According to Erb, the reaction to electricity determines this case of diplegia facialis to the difficult paralyses; with no prediction for a quick cure.

Excluding as the cause of the paralysis; traumatic injuries, ear-affections, rheumatic influences and acute infectious diseases, syphilis remains as a possible etiological cause, although, true, we have little subjective proofs in the anamnesis. (Dec., 10, there was a little vesicle on the penis—four weeks after its appearance, there were noticed some kind of vesicles in the mouth and an adenitis indolens in the neck, which later however amounted to very little). But, as in this case, the paralysis occurred about 1 1-2 months after the appearance of the vesicle on the penis, i. e., hardly before the eruption in the mouth, so we suspect syphilis, considering Fournier's opinion, that paralysis of the facial nerve occurs early with the secondary phenomena, but according to Dargaud, in from one and a half to eight months after the appearance of the first sign of infection; in one-half of his 18 cases, earlier than three months.

As regards the character of a syphilitic affection of the Fallopian canal, agreeing with Dargaud, there are oftener than anything, periostitides, recognizing this also in our case, and supposing the possibility that the syphilitic periostitis, irritating the nerve, which it compresses, produced in the latter a perineuritis.

In view of the neglect of a grave case of paralysis, we commenced an energetic, united specific treatment. From March 14th to May 14th, with small interruption, the patient injected himself with 30 frictions of hydrarg. nit, Zi. To this he used warm baths. After a month, i. e., after the twentieth friction, he received 5grs. potassium iodide from five

to six times a day. A nutritive food was ordered; the general condition all the time was satisfactory; the weight fell from 147 to 142—and this loss he soon regained.

The local treatment consisted of daily galvanization of the muscles of the face and of the trunk of the facial nerve with a current of from 10 to 14 cells. There occurred alteration during galvanization. After a month and a half massage of the face muscles was added. After somewhat more than two months, although little, we first began to observe that the electrical reaction of the muscles on the faradic current returned, then daily faradization was ordered and galvanization every second day. Regarding the general progress of the disease, it is necessary to say this; the voluntary contraction in the paralysed muscles began to appear 1 1-2 months earlier than their reaction to the faradic current.

Something of interest, among other things, in this case, is the weakening of the tactile sensibility on the right side of the tongue at the time when the muscular paralysis of this half of the face began to disappear which was sooner than on the left side. The dryness in the tongue diminishes under the influence of medication, principally due to the re-establishment of the function of the secreting cells of the facial nerve, coming from the Fallopian canal into the chorda tympani. With the disappearance of the dryness, the sense of taste, although slowly, became re-established. After a month the tactile sensibility in the middle third of the tongue improved while in the right half it was weaker. Bernhardt observed twice a weakening of the tactile sensibility on the affected side in paralysis of the facial nerve, and this, surprisingly, on the side, which in every other respect improved considerably. May be that the periphtric tactile nerve apparatus is in an abnormal state of irritation in consequence of considerable dryness on the left side, at that time the more affected side, while on the right side, which is faster improving with the re-establishment of the function, the hyperesthesia disappeared.

We can also consider, as proposed by a few authors, the possibility of an anomaly in the distribution of the sensory nerve endings of the tongue, which are sup-

plied by the chorda tympani, but not by the n. lingualis; on the other hand it is possible to admit that the periostitis of the Fallopiian canal is worse on one side than on the other, whereby the re-establishment on both sides was not equal.

CASE II.—Soldier, E. K., aged 23, private occupation, farmer, entered the neurological department of the hospital, July, 9th, 1891. Examination on the same day. Anamnesis: The parents of the patient are healthy, father does not drink, mother suffered from headaches, brothers and sisters healthy. When a child, the patient had variola and in youth suffered from headaches. Does not drink and had no syphilis.

While in service he developed trachoma and was sent to Nomechoff station for eye-patients, where, two months ago, he was attacked by severe headaches in the posterior inferior region of the head, on the right side, which prevented him from sleep; after this he ceased to close the right eye and the face contracted to the left; three weeks later such pains also occurred in the left half of the head after which the patient ceased to close the left eye. With this the face became more symmetrical but heavy and was changed in its expression.

Objective examination: The face of the patient is covered with deep scars as the result of small-pox; height, short; body, symmetrical and well nourished. Careful examination reveals a normal condition of all viscera. The skin, tissues and bones show no evidence of syphilis. The strength of the hands and feet is satisfactory, he walks heavily, he stands poorly on one leg and this gets some worse when closing his eyes. Sensibility is equally conserved on both sides of the face. The patellar and cremasteric reflexes are energetic.

Sight, motion of the eyeball and of the tongue are normal; the tactile sensibility is equal on both sides of the tongue and equal to the sensibility of the lips and cheeks. The sense of smell [after elevation of the nostrils] is well on both sides. The patient can neither elevate the eye-brows over the nose nor frown.

The eyes do not close, and with the effort to close them, the angles below the upper eye-lid bend somewhat. The conjunctivæ are hyperæmic. The conjunctival sac is always full of tears. The lids of both eyes are in contraction. The lower lid is drawn out from the eye-ball, especially at the internal angle, in consequence of which there is a constant flow of tears. The patient can neither whistle or laugh nor show his teeth. He also can not

elevate or move the angles of his mouth in one or the other direction. The angles of the mouth are hanging down—the mouth half open. The speech, in consequence of the indistinct pronunciation of the lip consonants and some vowels, is indistinct.

The patient complains of an intense dryness and of a bad taste in his mouth. The patient can differentiate different test solutions and determines even the strength of the solution. He does not complain of any weakening of his hearing, on the contrary complains of some greater ability of hearing. It is disagreeable to him, when he hears the sound of a little bell [hyperacusis], besides the patient has always a noise in his ears. Dr. Heyman pronounced this organ of hearing normal, both anatomically as well as in "function." Relation to electricity: Neither the faradic nor the galvanic current can produce any contraction of the muscles of the face—no matter what strength of current was tried. On irritation of the muscles with a strong galvanic current [26 cells Stoerer's apparatus] it was found that $An\ SZ = Ka\ SZ$, whereby the contractions were slow.

Thus we have before us a case of grave bilateral complete paralysis of the facial nerve, due, perhaps, to its infection by a perineuritis of unknown cause—higher than the ganglion geniculatum, but lower than the internal, dry orifice.

Lack of taste is explained by the excessive dryness in the mouth. The treatment consisted of daily galvanization with a current of medium strength [10 elements]. The self-feeling of the patient became better from the very beginning of the treatment; the noise in the ears and the dryness in the mouth diminished rapidly, the eyes began to close better, the paralysis disappeared, the face assumed better form in consequence of the return of tonus of the muscles.

At the end of August appeared an irritability of the muscles to a faradic current, but a contraction through the nerves and to the galvanic current did not appear until the middle of September, when I turned over the department to Dr. Irwortsoff and lost the patient from my sight.

This second case of diplegia facialis, as to its clinical character, ought to be counted with the peripheric paralysis of the facial nerve, where the pain in the neck, even in

the whole half of the head appears earlier or even at the same time with the paralysis of the seventh pair. Similar cases were demonstrated by Prof. Charcot in his clinics on Tuesdays. According to Charcot, painful paralyses of the facial nerve were studied first by Weber who found them in half of the cases of paralysis of the face. Afterward, Testar, in his *These de Paris*, 1887, written under the direction of Prof. Dieulafoy, pointed out that the pain is localized in the auditory canal [on the side where the paralysis is formed or about so formed]. These pains are either partial or general. In the latter case they may at once occupy the whole half of the face. Sometimes these pains are very severe; sometimes hardly felt, but nearly always forming a prodromal appearance to the locomotor paralysis; in some cases they appeared in about eight to twelve days after the first appearance of locomotor derangement and continued two to three days after the appearance of the paralysis in general.

The cause of the pain in paralysis is not yet defined, but according to Testar its existence has a special clinical interest as to prognosis, the intensity and continuation of the pain corresponding with the gravity of the disease. But a case of Charcot and our second case, show that there is no relation between the intensity and continuation of pain and the gravity of the disease.

In his case and in his lectures on Tuesdays, Charcot, while speaking of the causes of paralysis of the facial nerve, recalling Neumann's work, asserts decidedly that cold, syphilis, and trauma, serve only as exciting causes for this affection, to which however the patient is disposed by heredity (especially skeptical is Charcot in regard to so-called "cold" paralysis). This suggestion is supported in both our cases, as in them there were neither trauma nor cold and we could not with surety state the causes. Is it in both cases not the fault of the nervous system?

In conclusion, we must say with Charcot that we are far from knowing all about paralysis of the facial nerve.

Finishing my article, I feel it my pleasant duty to express my feeling of deep thankfulness to Prof. N. M.

Popoff, of the Warsaw University, for his numerous services rendered to me while working at the Zjasdofsk hospital. This same belongs also to the Superintendent of the psychiatric department, P. A. Wiktorofsky, and L. Stefjanovich, physician-in-chief, for their readiness to help me with word and deed.

The Evolution of Scientific Neurology and Its Utility in Medical Practice.*

By JOHN PUNTON, M. D., Kansas City, Mo.

Professor Nervous and Mental Diseases, University Medical College; Special Lecturer
Western Dental College; Neurologist to All Saints, Bethany, Scarrit Training
School, K. C., F. S. & M. R. R., and Mo. Pacific R. R., Hospitals, Etc.

GENTLEMEN:—In all ages of the world the nervous system has attracted the attention of the brightest intellects of every department of learning, and this attraction is even greater to-day than ever before.

Long before the Christian era it was the subject of much controversy and wild speculation and the growth and development of ideas and their crystallization into facts in regard to it is not only full of interest, but important to every student of medicine. Its earliest conception furnished the material which formed the basis of all the ancient philosophic beliefs embraced in the term Psychology and amid the infinite variety of erroneous and jarring opinions a splendid system of modern Philosophy has slowly but surely been evolved which to-day constitutes the science of neurology.

In their attempt to solve the problems that existed between mind and matter the Greeks were led into a maze of error, doubt, and superstition which unfortunately hindered rather than advanced the questions at issue, besides having the disastrous effect of leaving behind their "Foot-prints on the sands of time."

The marvellous correlation of all the various forces which constitute our common human nature, and its endowment with that vital spark or essence we term life, has

*Read before the Tri-State Medical Society at Jacksonville, Illinois, Oct. 10, 1894.

furnished a stumbling block not only for the ancients but for the students of every age, and the nearer we seem to approach the mysterious realms where the living forces of all our mental activities are silently elaborated and put forth, the more formidable the obstacle appears, and the more liable are we to mistake matter for mind. In no department of study has there been such a brilliant display of intellectual talent and ingenuity of purpose as is found engaged in unravelling the secrets of the nervous system, the details of which, though scattered throughout the whole domain of medical literature, when gathered together, constitute the material comprising the science of Neurology.

Standing at the very threshold of such a task, is it any wonder that we find the Greeks bewildered and forming conclusions based on suppositions which to-day we reject and ridicule, yet the evolution of scientific neurology would certainly be incomplete without their mention. Hence among the vague impressions of the ancients in regard to the brain we find that they recognized it as a secreting gland, that it acted as a sponge attracting to itself the humidity of the body. Even the great Plato imagined that the Deity formed sublunary beings in part of his own nature and that to these the duty of the manufacture of animal bodies was entrusted. Following in his footsteps the learned Hippocrates imbibed quite freely of this false philosophy, and consequently became entangled in its web of superstition.

Later we find Aristotle led into similar pitfalls by theorizing from incomplete observations for he regarded the brain as a cold humid mass destined to temper the heat of the heart. Such doctrines were introduced into Rome by the Greeks, and in course of time a famous physician, Galen by name, demonstrated the fallacy of Aristotle's pet theory by simply exposing the brain of an animal and finding it equally as warm as the heart. But Galen was not free from censure for he accepted the nonsensical notion advanced many years prior by a Greek physician, Erasistratis by name, who believed that the air we breath was converted into animal or vital spirit, which we now translate to mean nervous energy, nevertheless, Galen by his teachings and writings so influenced medicine that he was esteemed infal-

lible authority for fully twelve centuries.

With the fall of the Roman Empire we can readily understand that all forms of knowledge and scientific investigation practically ceased and there was no tangible progress in the knowledge of our present subject from Galen's time until the medieval epoch which we may date from the beginning of the 10th century. During these dark ages medicine declined in Europe but later was preserved and advanced by the Arabians who greatly advanced the science of chemistry. Having accepted many of the absurd dogmas of the Greeks and Romans prevented the Arabians achieving as much progress in neurology as chemistry.

"About this time the introduction of Greek science and philosophy into England was effected by a student of Oxford, John Basyng by name, who, in the 11th century, travelled as far as Athens in search of knowledge and returned laden with writings of Greek authors."

"Contemporaneously another student, Abelard by name, spent many years in Spain and he also returned to England with copies of Arabian writings." From this combined literature we learn that hundreds of years had passed by without any advance beyond the absurd ideas of Aristotle, as Galen's more advanced views seem to have been entirely ignored. This brings us then to the close of the 12th century, and at the beginning of the 13th, the desire for the truth among the nations of the earth re-asserted itself and the government of the various countries enlarged their opportunities of learning by increasing the size of their universities and faculties. With this revival the study of medicine received new impetus, and this advance was especially marked in Italy. Medicine had thus far been based upon imperfect observation, and biased by erroneous theories it now began to be advanced to the standard of a science. It was not long before the dissection of human bodies was legalized, and in 1315 we find Mondini, of Italy, dissecting before a class of students; shortly after, all the universities followed this example, and "Vesalius" became the recognized founder of anatomical Science.

Then followed in quick succession numerous discoveries in anatomical and physiological realms which greatly

aided the evolution of neurological science. In culling the preceding historical facts I am greatly indebted to the valuable work recently issued by Dr. Victor Horsley of London on "The Brain and Spinal Cord," from which I quote freely. It has well been said that to understand even the beginning of a history you must start at a certain distance from the beginning, for it is not until the things done at the beginning are more or less developed into their results that we can discover the true and full import and bearing of the things themselves, and this is eminently true of the subject before us. In tracing the general outline therefore of the history of the Evolution of Scientific Neurology, it seems to me that it naturally divides itself into two great epochs, the first dating from the days of Vesalius, the founder of Anatomical science, in 1514 A. D., and the second from the introduction of the microscope into medicine by Leuwenhock, in 1690, A. D., until the present time. These two epochs stand out in special salience and present a marked contrast in the steepness of the rise of knowledge when duly compared. In addition to this they also represent the two great departments of study which have furnished us all that is known to-day concerning the nervous system and its appendages. These may be classified into:

1. The Macroscopical Epoch, and
2. The Microscopical Epoch.

In these are included all the varied lines of scientific research of the different centuries represented, and all the various discoveries from what ever source pertaining to our subject belong to one or other of these two periods. Without any desire to under estimate the labor and value of the discoveries of the various investigators of all lands belonging to the first epoch, nevertheless, it is to the second that we are compelled to recognize as furnishing us the most brilliant results as well as the most practical knowledge. In this connection it must be remembered that the student of medicine has necessarily been forced to depend upon the different means and methods placed at his disposal by the collateral arts and sciences of his own epoch, hence the smallest technical discovery frequently becomes of inestimable value. Considering the crude and limited means and methods of investigation belong-

ing to the macroscopical period, the labors of such men as Vesalius, Eustachius, Fallopius, Pacchioni, Galen, Harvey, Willis, Vieussens, Sylvius, Meckel, Scarpa, Reil and many others whose names are already identified and immortalized in human Anatomical Nomenclature, cannot be overestimated, and their labors, as well as the nature and character of their discoveries, testify to their greatness and earnestness of purpose. Nevertheless it is to the *Microscopical* epoch that our greatest advance belongs, and it is to certain consequences belonging to this period that I desire more especially to call attention at this time—consequences that seem to me to be of the utmost importance to the general practitioner, as well as to the neurologist in his daily practice. Prior to the introduction of the microscope into medicine by Leuwenhock in 1690, our forefathers realized the necessity of some agent which would extend the range of their special senses and enlarge the horizon of their limited powers; and even after this want had been supplied by Leuwenheck, it was not long before they discovered that even the single lens microscope allowed but a faint image of the hidden mysteries of the nerve fibre and cell, and this fact simply further increased the desire for further light on the subject and stimulated the inventive genius of the age to action. As a result, new means and methods of investigation were devised and their utilization led to much controversy and theoretical speculation which ultimately led to valuable discoveries along the lines of anatomy and physiology, and in no department were these more marked than those pertaining to the central nervous system. As Edinger says: "When we remember that up till about the middle of the present century the most prominent methods of investigation were anatomical dissections with the knife and teasing out fibres from hardened specimens with forceps, it is easy to understand that the advance in histological neurology was necessarily slow and unreliable." Even up to the time of Gall, who was born in 1758, we find that the principal idea that obtained in regard to the brain by the best Anatomists was that of a semi-structureless mass exhibiting certain constant ganglia, such as the striated bodies, the optic thalami, the cor-

pora quadrigemina and the pineal gland, but, on the whole, it was regarded as a single organ rather than as a group of organs, and the method of dissection practiced in the medical colleges, as I have already indicated, was to examine it *macroscopically* rather than *microscopically*.

By an elaborate series of experiments and observations on both animals and human beings, Dr. Gall formulated a theory of his own concerning the brain and its functions which was a decided departure from any others then extant, and it had the effect of startling the entire medical world. Notwithstanding his nonsensical phrenological views, we find in addition that one of his leading positions was the recognition of the brain as a multiform organ which is composed of a number of distinct nervous organs each endowed with its own special function. To quote his own words: "That, as all the faculties of the mind are limited to the common sensory or brain, nature, like a skillful general, instead of confounding every part with every part and every faculty with every faculty, has marshalled this most important organ into a definite number of divisions and has given to every faculty the command of a separate post."

This elaborate theory and the facts to which it appeals was severely criticized and condemned, and, for the most part, rejected. Among others, we find no less a personage than Sir Charles Bell, attacking it as follows;

"The most extravagant departure from all the legitimate modes of reasoning, though still under the color of Anatomical investigation, is this system of Dr. Gall. It is sufficient to say that without comprehending the grand divisions of the nervous system, without a notion of the distinct properties of the individual nerves or without having made any distinction of the columns of the spinal marrow, without even having ascertained the differences of cerebrum and cerebellum, Gall proceeds to describe the brain as composed of many particular and independent organs and to assign to each the residence of some special faculty."

While Gall's theory was subject to much doubt and censure, nevertheless the fact remains that this is the first mention of a tangible character we have in medical litera-

ture of that science which to-day, promises to overwhelm all other departments in point of interest and value—I refer to the Science of Cerebral Localization. So extraordinary were the discoveries of Gall in their bearings on the current view of the structure and functions of the brain, that many of his leading positions have been verified and absorbed into scientific medicine, while the empirical part of his theory, viz., that which pertains to Phrenology, has been wisely discarded and left outside the pale of science.

In passing, however, let us not do injustice to the inventor of this seemingly extravagant hypothesis, for he certainly has high claims to be remembered, if not as the founder, then as an anatomical discoverer of great merit.

Simultaneous with these controversies in regard to the brain, Sir Charles Bell, by a series of brilliant experiments, discovered, in the year 1811, the important fact that the nerves connected with the spinal cord, subserved the functions of motion and sensation. A few years later, according to Dr. Starr, Flourens openly opposed from a scientific standpoint the doctrine advanced by Gall, and, in 1862, made his announcement to the French Academy maintaining that the brain acts as a whole, its various parts not possessing distinct functions, and supported his views by an elaborate series of experiments with which you are all familiar. This had the desired effect of converting those who were disposed to favor Gall's more advanced theory, and thus the monistic view of the brain again reigned supreme. While Flourens was busily engaged in France assailing Gall's theory a report came from Thomas Hood, of England, which three years later was verified by Bouillard of France, to the effect that disturbances of speech were often produced by diseases confined to the frontal lobes of the brain. The subsequent publication of these and other cases stimulated Broca, who, in 1861, designed to locate definitely the speech area, which he assigned to the third frontal convolution and recent experiments and experience have verified its truth.

"These facts threw doubts on Flourens' doctrine," says Dr. Starr, "and in 1862, Huxtings Jackson, of London, and Meynert, of Germany, advanced the opinion simultan-

eously that the anterior portion of the brain only was concerned in motor acts, the one reaching his conclusions from the study of localized spasms, the other from the observations of the lesions of general paralysis. It was very evident from this that the teachings of Flourens needed confirmation and, in 1869, Fritsch and Hitzig, of Berlin, undertook to verify them. Their experiments proved beyond doubt that in animals the anterior portion of each hemisphere was appropriated to motor acts. In 1873 this was again verified by Ferrier, of London, who also greatly enlarged upon them by demonstrating that the posterior portions of the brain are sensory, and he also distinguished between various sensory areas assigning each special sense to a special cortical center. Thus the doctrine taught so strenuously by Flourens, and so widely accepted was wholly discarded, and the view originally taught by Gall and enlarged, improved and verified by others, was finally accepted, and to-day reigns supreme.

While these advances were being made other investigations were in progress, which only the perfected microscope and the employment of re-agents and other modern paraphernalia could make progress in histological Neurology possible, and each improvement in method marked an improvement in definite and exact knowledge, besides emphasizing the fact advanced by Luys, "that in the long process of evolution of the nervous system which extends for ages we arrive at the truth only step by step, and as soon as one problem is mastered, another and another of still greater magnitude appears." Hence it was not long before it became apparent that the time honored process of teasing out the fibres would not reveal the desired information.

A new method was therefore sought, and "fortunately for us," says Edinger, "was furnished by B. Stilling who, in 1842, laid the foundation of Histological Neurology by preparing thin sections or rather whole series of sections made in different but definite directions through the several parts examined." By means of this method Stilling was able to trace the course of nerve tracts and thus furnished us the key which has unlocked many of the secrets of the Histological elements of

the nervous system. The perfection of this method has wrought marvellous changes in our conceptions of the various organs and led the way to still further advances by the advantages derived from staining the sections in different colors.

Starr also informs us that "In 1850, Turck, in his studies of the spinal cord, discovered that a break in its conductivity led to a degenerative process which spread upwards or downwards according to its special seat. This great fact, and its further elaboration by Waller and others, has proved of immense value in the diagnosis of diseases of the spinal cord, and furnished us the very important Pathological Classification into Systemic and Non-Systemic diseases of the cord."

Twenty years later, in 1870, Von Gudden discovered the fact, "that if either peripheral or central nerve substance was removed from new born animals the fibres connected with the part removed ceased to develop and were gradually destroyed. For instance an organ like the eye when extirpated from an animal at birth the optic nerve fibres atrophy and can thus be traced to their cerebral origin." "This atrophic method has brought to light many new and important facts in regard to the histology of the brain and has been utilized in determining the course of various nerve tracts." Another very important discovery was made seven years later by Fleschsig who, in 1877, found that in foetal life certain nerve fibres which were functionally related developed simultaneously and in the definite direction in which they were destined to transmit impulses and could thus be differentiated from the many other cerebral tracts or fibres. Prior to this discovery the structure of the white matter beneath the cortex had been demonstrated by the microscope to be composed of medullated nerve fibres passing in every conceivable direction, and that in the healthy adult they looked all alike on section, hence it was impossible to differentiate those that were functionally related. But after Fleschsig made his discovery it was possible to separate the different tracts and trace their course and destination. "It was found that during the embryonic period certain fibres acquired their medullary sheaths at different times and of all the various fibres of the cerebrum only one set contained medullary matter." Hence it was compara-

tively easy for Fleschsig to discover and partly trace out their special course which when further elaborated gave us a true and complete knowledge of the tracts of nerves which subserve voluntary motion, any injury of which causes the various forms of paralysis. It was also found by further comparison that these three methods, viz.; The degenerative method, discovered by Turck in 1850; second, The atrophic method of Von Gudden, in 1870, and third, The developmental method of Fleschsig, in 1877, all combined to show the existence of separate tracts of fibres in the white substance of the spinal cord, each of which endowed with specific functions; and later researches not only elucidated this truth but also differentiated them one from another until to-day we have a very complete knowledge of the histological elements of the spinal cord. In addition to this, it can readily be seen that it was but a simple step to apply the same methods to the study of the brain, and their further elaboration has yielded the most marvellous and brilliant results beside furnishing us a correct knowledge of its several parts.

Thus the macroscopical and microscopical study of the nervous system has mutually revealed many of its former mysteries, and their successive stages of growth and development have contributed their share in clearing away the many obstacles which obstruct the wheels of medical progress until to-day their combined results have placed us in possession of an almost completed and perfected organography of its several parts, besides rendering distinctly visible all those myriads of histological elements which were formerly concealed from view, a thorough knowledge of which, together with the harmonious results of each, constitutes, in my opinion, the evolution of scientific neurology.

The utility in medical practice of all the remarkable facts and principles which neurological science furnishes, can not be over estimated. "Dr. Hughes tells us (See N. Y. Medical Journal, June, 9th, 1894) that the practice of medicine is rapidly becoming one of neurological methods, and the best Neurologist, all other attainments being equal, must of necessity make the best general practitioner."

There is no doubt of the correctness of this statement, for the diseases are few and far between in which not only a

neurotic element is found to exist but often the disease solely depends upon its presence, hence a thorough knowledge of the nervous system is absolutely essential for all true success.

Then again the nervous system is not, as some erroneously suppose, simply an appendage to the rest of the body, but it is an integral portion of every part of it, not only having special organs of its own but entering deeply into the formation of every other organ, and by virtue of the immense preponderance of gray cerebral tissue, man stands immeasurably above all other created beings. No organ of the body is, therefore, exempt from nervous influence, and no pathological change can occur without a corresponding neurotic lesion, even though the disease be confined to organs other than the nervous tissue elements proper.

The test of a physician's skill and knowledge, therefore, in general practice is in exact ratio to his ability in elucidating this great principle and overcoming its pernicious effects. All diseases are interpreted by means of symptoms which are simply the expression of some derangement of structure or function. If we know the function of a part or organ which is the expression of its vitality, we are then prepared to recognize its derangements, and this can only be done by a thorough knowledge of its anatomy and physiology, for it seems, as Dr. Starr aptly says, to be a constant fact all through the history of the progress of medicine that just in proportion to our knowledge of the anatomy and physiology of any given part, does our knowledge of the symptomatology of its disease, advance.

"The great aim, therefore, of scientific investigation, is to associate symptoms with lesions, and this has been done to a remarkable degree of late chiefly along the lines of anatomy and physiology through the instrumentality of the perfected microscope."

In no other department of medicine are the results of progress more conspicuous and striking in this direction than those which belong to the science of neurology, and hence are even more helpful and necessary to the general practitioner than any other branch of medical knowledge, for there is no

department of medicine that consists more largely of applied anatomy and physiology than neurology, and, consequently, it is of the greatest aid to the general practitioner in his daily avocation.

By the application of neurological methods to general disease, the physician is enabled to render a finer discrimination in classification and diagnosis, and therefore more ably prepared to combat the evil consequences which so often result from ignorance in their treatment and prophylaxis.

It is only those members of the profession who are unwilling to pay the price which progressive study demands, and who refuse to submit to the claims of the highest and best knowledge and attainment in medical science that ignore the importance of the practical application and utility of neurological knowledge in general medicine.

He who attempts to practice medicine without grasping the fundamental principles of neurology, is but half prepared to render full justice to his patient, yet how few practitioners, comparatively speaking, fully understand its full import, and are much less able to describe correctly even the grosser anatomy and physiology of the brain and spinal cord, although without such knowledge they are certainly incompetent to make a correct differential diagnosis between lesions affecting the brain, spinal cord, peripheral nerves together with other organs, much less state their pathological character. No one will deny, however, that these two features constitute the most important elements of diagnosis in all the various forms of disease.

In conclusion then, I still contend that the fact remains that neurological science is so closely interwoven with all other departments of practical medicine that it is impossible to divorce it from any of them in matters of diagnosis, and, consequently, its utility in interpreting and ministering to disease is so important and far reaching as to include all that is embraced in general, as well as special practice, and the wise physician is he who is willing at all times to heed its claims by calling to his aid this most essential branch of medicine.

Study on Criminal Anthropology. Dedicated to the first Pan-American Medical Congress.*

By DR. ABUNDIO ACEVES, Gundalajara, Mexico.

HUMANITY with an insatiable desire for reformation and progress, has been inspired, almost unconsciously with an ideal; to labor for the removal of the black cloud of penalty from the earth. It would predict the next age as one of gold.

Strange to say, however, a spirit of fierce opposition has lately arisen to the reforms that modern positivism has applauded so much. Penalty is a black cloud; but as necessary as the rain that moistens the soil.

The medico-legist, Cesar Lombroso Carlos Ferri, professor of criminal law, and the magistrate Garofalo, hold this banner up before the scientific world of Italy, where perhaps criminality is greater than in other civilized countries, but where the social defense is just as sacred as the divine precept, "*Servate ipsum.*" Hence the activity of thought which makes the press creak, and hence the foundation of international societies to devise means for the regeneration of penal legislation and the penal system.

This has been the intent of the Anthropological Congress in London in 1872, of Rome in 1885, and that lately held in Brussels. Positivism studies the natural history of man under the criminal aspect. This is viewed by Anthropology in the same way as we view soldiers or sailors from a military or naval standpoint. The Italian schools proclaim this doctrine, that the criminal is a being, that in virtue of a group of mental and physical peculiarities belongs to a distinct type; that he is morally defective, and so not being

*Presented and read by title to the Section on diseases of the Mind and Nervous System, Washington, D. C., Sept. 8th, 1893, and translated from the Spanish by Dr. Arthur E. Mink, St. Louis, Mo.

responsible for his acts should not be punished, but only treated as one diseased. For them the criminal is endowed with characteristics which make of him a type, distinct such as physical deformities especially the hair of the head abundant, black and woolly, atavistic degeneration and finally a neurotic constitution with teratological, psychical and pathological anomalies. They have not been able to prove however that such traits are lacking in moral persons.

The tendency common amongst criminals to tatoo the skin, and use slang, along with diminution of moral and physical sensibility, may also be found in the non-delinquent. It is a common sentiment that the moral incentives of education and example, should be of greater influence with criminals. The conclusions of modern positivism should be mathematically deduced from the criminal type. Hence it proposes as a social benefit, not to follow the paths established by the experience of the majority of humanity; on the contrary, it will abolish sacred distinctions, such as love for ones neighbor, and will begin with force as against law, with the brute law of the struggle for existence proclaiming the selection which condemns the malformed. The conditions of social life will then agree with the sublime words, "Love thy neighbor as thyself." So positivism has despotically decreed. This anthropological doctrine, just like scientific falsities of the adherents of phrenology; we declare to be insufficient to explain the difference existing between the criminal and the insane. In the first, the mind pursues a definite end and is always responsible; while in the second the intelligence is disturbed and therefore not responsible. Thus crime will always inspire horror and indignation; while the insane whatever be their acts will inspire nothing but pity. Is it creditable that such distinguished talent looks upon human liberty as an error or illusion? So Promethens must remain forever bound upon the hard rock of the material; while the ideal will console others whose faith in human efforts to control the passions, will animate them in trying to make right prevail over force. To elevate the struggle for existence up to the doctrine that there are only two classes of individuals in the world, the weak and the strong, is manifest in-humanity. I repeat

that determinism seeks to blot out the enchanting words, compassion, pity, love; and seeks to render barren the conquests that Juan de Dios and the Vincent de Pauls have made with charity, that Providence on earth! Philosophy is love of knowledge, which in its avidity for the truth fluctuates between love and hatred for human actions. The same signs which are said to be present in the delinquent, will open a broader field for the excuses of malefactors, if this doctrine becomes widespread. Fortunately it will become less than stationary, and the views of some of its own partisans like M. Foaille attract attention already in this respect.

After all every one is entitled to his opinion, and should be blamed by no one; but it is the same positivism which is blamed by the classical school with a consideration for delinquents which is harmful to society, and which in the name of physiological evolution speaks to logical eclecticism, of progress in judicial forms. It expounds the same to damage the inquisitorial system, which should not be possible in these days of liberty. They propose their reforms by saying that, a group of physiologists should examine the delinquent as to his anthropological signs in order to eliminate him, either by putting him on a desert island or by killing him. Compassion or inhumanity! What does modern positivism answer? As for us, we believe humanity will never abandon those sentiments inherent in its nature, nor that any judge will inflict a sentence founded upon brute force as opposed to inalienable right.

Psychical and Physical Sanitation. The Influence of the Press Thereon.

By C. H. HUGHES, M. D., St. Louis, Mo.

We live in an age when vigorous brains are really of great value in the affairs of men, notwithstanding the marvellous success of some men in making money would seem to indicate that this article is unnecessary in this form of success. My friend, Dr. J. T. Searcy, of Tuscaloosa, Ala., seems to regard brains as very essential to success in life, as may be seen from his recent address on the secret of success before the students of Alabama Medical College at Mobile. But he also got the best of his experience as to the value of brains in a hospital for the insane, and "brains" are really a very useful and much needed article in such institutions. He talks very learnedly and entertainingly about the phylum, the mother's phylum, the father's phylum, the hereditary phylum and their influence on the brain ascendancy and degeneracy of man.

But here is the way he talks, and he is right sensible for an Alabamian, and it is a rule with me that whenever I can get a sensible man to think and talk for me, I prefer to speak by proxy.

He says: "Anything and everything that in any way injures the brain structure or injures or impairs its functional activity, just so much impairs the man's ability to succeed and excel and to 'live properly.'

"There is no question in which we are more interested than in the functional capacity, and the structural integrity of this 'nerve center' within us. Our safety, our survival, as well as the continuance of our phyla after us with abilities to survive, depend upon the questions involved in brain improvement and brain hygiene, more than anything else.

"The brain is the organ that adjusts the man to his environments.

"The individual receives his phylum from his ancestry or, rather, is a prolongation of the ancestral phylum, at a certain level of intellectual competitive ability and endowed with certain inherent habits of observing rules of conduct; he then raises or lowers those levels by the amount and the kinds of practice he performs himself, and his phylum goes past him into its stage of another generation at a higher or lower level, in either or both of these particulars, according as he has done abundant or little high-grade practice. Nature's way of improving abilities is by eliminating the less capable.

"To increase the brain ability of a phylum above the level that naturally belongs to the ancestral line requires great and continued effort. It is not accomplished in a day, nor by fits and starts, but it takes the steady work of a lifetime and of generations. It is hard to improve lineal ability; there is no royal road. On the other hand, it is very easy to lower and let down lineal ability; simply doing nothing, does it in one short generation; and besides anything like disease, injury, defect or failure of the brain does it.

"The 'abnormal man' is very numerous in human society. He is a very troublesome factor in it. He is not adjusted to its highest attainments, consequently he is either an incubus upon its welfare by his intellectual disability to care for himself, or he is a menace to its safety by his inherent habits of not adjusting his conduct according to high moral and ethical rules. What to do with him is a most serious question. The 'abnormal man' is generally a degenerate; he has come down from higher levels and is defective, both intellectually and morally. There are many kinds of 'defects' in society. We have some good, easy, good-for-nothing fellows, who are intellectually weak and passively good. Such a man is inherently intellectually, incapable of making or competing for his living, while he possibly passively adjusts his conduct to the rules of society. Those who are simply paupers are of this class. There are real paupers in high life, in wealthy lines, supported by the wealth accumulated for them by others, though they naturally belong to the eliminating ranks. Left to them-

selves, they rapidly take that direction—they can not compete—in time they or their phyla dissappear.

“Among the abnormal men we also have the inherently vicious and the insane. Nothing is more true than the statement, abnormalities in the large majority of cases belong to degenerating deteriorating phyla; they are such as we find them because their phyla are not maintaining their comparative levels,—they are on the down grade.”

You see he thinks about two-thirds of all of the phylums are wasted or become extinct. If he were out here among these denizens of the Golden Gate City he would think differently.

Dr. Geo. F. Shrady is reported to have said in a recent interview that more important than a bureau for distributing seed is it to have a bureau for killing the seeds of disease. These will be provided when the people heed their health interests as they do their agricultural, and endeavor to stamp out hereditary death and degeneracy as they do to drive out foreign pestilences when they threaten to invade the land. These will be provided when men care as much for their brains as for their bodies, and for both as for their houses or horses.

In my address at Washington last year I recommended the creation of a Sanitary Department, with its chief a member of the Nation's Cabinet, that the people might be saved the final doom of decadence that befell the nations of antiquity, through ignorance and neglect of national sanitation, moral, mental and physical.

We quarantine against the degenerate, the defective, the diseased and the poor in purse from abroad, but do nothing as a State or Nation to quarantine against the comingling and spreading of our own bad blood, which breeds and multiplies defectives of mind, morals and body. We build hospitals, homes and reformatories for these, but not so fast as the insane, the idiotic and the vicious are increased to overcrowd them, by marriages that ought to be interdicted by law.

If municipal governments conformed in their statutes to the light of modern medical knowledge and surgical suggestion on these subjects, the insane, epileptic and most of

the nervous hospitals and homes for the idiotic, the insane, the mute, the imbecile and the penal reformatories would soon be unnecessary. These monuments of our enlightened advisory philanthropy would give place to wholesome laws of prevention, commemorative of our admonitory providence. The insane temperament and neuropathic diathesis, breeding their hords of degenerates would then be in the way of extinction. What right has an insane man, a "crank," an epileptic or an idiot to afflict posterity, blemish and cripple society or burden the state with the perpetuation of his kind, and what right has any man or woman to marry such? What rights have the consumptive or the syphilitic in this direction? Through the advances made in medicine and proclaimed to the people, the world is gradually getting its eyes open to the perils of morbid and vicious heredity, and the entailed aptitudes of individuals to disease are largely in the defective resistance of the nervous system to exciting causes of disease. Bacteria furnishes many of the seeds, but an unresisting organism gives the soil essential to morbid implantation and growth. If the soil be not recipient, the bacteriologic seeds fall on stony places. When as much public attention is paid to sanitation as is now given to agriculture, arms and education, there will be a Sanitary Department of state, and it will seek out and inform the people from the teachings of our profession how they may be made strong enough to resist disease and build and maintain the greatest and most enduring among the great nations of the earth. Violent and radical remedies and revolutions for small political ills magnified by morbid imagination are the offspring and suggestion of unhealthy minds. Already the great messenger of light, the daily press is seeking to learn from us how the people, and the nation builded upon the people, may be psychically saved from those destructive influences which tell against health and longevity and against the perpetuity of our institutions. The press and people used to get their information from the quack advertisers, but now they get it in the regular way.

In view of the power of the medical press we should, in my judgement, continue to insist upon advancing the standard of medical education until no school in the United

States has a curriculum of less than five years of college study, and until a national Sanitary Bureau exists in all the States and in the District of Columbia; and a sanitary medical officer, perhaps a medical editor, shall sit in the President's Cabinet, the peer of the head of any other department of the Government.

And we should further continue our efforts until the profession of medicine is unified on the broad non-sectarian basis of a liberal scientific and clinical education, and the physician stands before the world the political and social peer of any man, as he now is, when educated and trained in the principles of our ethics and in the full light of clinical and collateral medical science.

The medical press, more than all other agencies, has promoted the advancement of anthropologic science in its physiologic and pathologic aspects, and made it more than ever apparent to the profession and the people that the highest and most "proper study of mankind is man." It has elevated the profession, elevated mankind and exalted appreciation in both, of the art of healing and the science of conserving health. Thus it has promoted and promotes the welfare of the people.

The secular press is indebted to us for more matter of value to the highest interest of mankind than to any single source upon which that wondrous nineteenth century miracle, the newspaper, draws to supply its columns. Many of the most ingenious devices of modern suicide are the perverted resources of medicine obtained from the medical press. The pleas to procure exemption from consequences of crime are distorted and legally misapplied principles of modern medical science, while real extenuations of apparent crime are obtained by lawyers from our pages.

The numberless cure-alls heralded to the public as panaceas for all the ills flesh is heir to, have all been modestly heralded for more limited and restricted use by us.

The ten thousand saving resources of hygiene by which epidemics are stayed and the degeneration of the race is retarded and its active diseases averted or modified in their courses, and the preservative embalming processes for the dead, have all first passed through the columns of the medi-

cal press, and we have furnished most of the subjects. We have been an everlasting boon to the undertaking and the tombstone business.

The great sanitary problems of the day which promote the comfort and health of the people have all first been solved through our pages.

We have taken the initiatory in all educational reforms in the secular and medical schools, and forced the latter and the profession to higher standards. The *esprit du corps* of the profession has been steadily advanced through our influence.

These are reasons enough for the existence of the medical press, and as individual influence is promoted by unity of effort this is reason enough for our existence as an association. The medical journal goes to the physician's home and office with the latest advances in the science and art, and keeps the alert practitioner posted in advance of the books. It promotes progress and fraternity and stimulates medical ambition and professional pride. Our journals are all medical mirrors, though only one bears that name.

The medical press has put a premium on brains, energy and research in the medical profession, and made the profession respectable before the people. It puts a damper on mediocrity, show and pretense in the profession, applauds and sustains merit and brings out modest worth so that it receives its true reward. It makes worthy men great, and measures littleness with the shortened tape-line of its own deserts. It gives to all deserving men liberally of well-earned praise, and takes away nothing from the undeserving.

The medical press has aimed high and persevered until it has filled the world with the true glory of American medicine and placed her great medical men where they justly belong, "high on the topmost stone of Fame's triumphal arch."

The medical press has made it a popular thing for the practitioner to read current medical literature, and lay upon the shelf the moldy precedents of the past until to be an advanced and reading physician is to be among the greatest of men.

The medical press has robbed medicine of its sectional prejudices so that the profession now knows no North, no South, no East, no West, and under its influence narrow sectionalism, and narrower sectarianism have retreated into the shade under the searchlight of brilliant discovery and advancing science. After our late war the AMERICAN MEDICAL ASSOCIATION was the first public body to be reunited through our benign influence.

The manifest destiny of the medical press is to shed the light everywhere until there shall be but one broad, non-sectarian profession, learning only truth from the teachings of science and applying it to the noble art of healing, of destroying and preventing disease.

The best men of our profession to-day are the men who write for the medical press. The press has made them and they have made the medical press what it is.

The mental caliber of the medical editor has expanded until he is now the peer of the best among his fellows in the profession, and the accepted teachers of the profession have advanced in ability until they are nearly equal to the medical editors, and that is the highest compliment that can be paid them.

The medical press is the telescope that searches out new worlds of observation and thought, the phonograph that registers and reproduces the thoughts and observations of its master minds, and the mimeograph that sets before the world a good type and copy for imitation and emulation by the medical men of the world.

In my last address to you, gentlemen, as I have said, I recommended a Health Department and a physician in the Cabinet, but I have seen no nomination as yet. Neglect of President Cleveland and of Congress in this important matter may be the cause of their luck in pleasing the country. Things will never go right until a doctor and a medical editor get into the Cabinet. A President should always take the right medicine. Congress seems to have taken the wrong medicine or none at all. It needs to get a "move" on.

I now take pleasure in introducing the toastmaster of the evening. His name was never "Dennis" but always Love, and I always love to introduce him,—Abstract of Presidential Address before the American Medical Editors' Association at San Francisco.

SELECTIONS.

NEUROTHERAPY.

THE CURE OF PROGRESSIVE PARALYSIS.—Marro and Ruata (Gazz. degli Osped) presented before the Royal Academy of Medicine in Turin, a man and a woman who had been treated for progressive paralysis, one having been cured some three years, and the other for one year. The treatment consisted in causing subcutaneous abscesses on the back along the spinal column, by means of cantharidate of potassium injections in the man, and essential oil of turpentine in the woman.

In the discussion, Lombroso thought the recovery due to the general febrile state induced by the injections rather than to the formation of abscesses. He recollected having seen several recoveries from progressive paralysis after the occurrence of small pox, and said that he had once artificially caused small-pox in a patient in which recovery followed.

Marro said he would not insist upon the exact explanation of the curative process but reminded those present that in variola there was an extensive suppuration. Lombroso replied that he recalled to mind a case in which the patient had been cured after an attack of typhoid in which there was no suppuration.

NEUROSES OF THE LARYNX.—In a "Note on Codeine," in the *Lancet*, Dr. James Braithwaite, of Leeds, after trial on himself and others, says: "Codeine seems to have a special action upon the nerves of the larynx; hence it relieves a tickling cough better than any ordinary form of opium. One-half of a grain may be given half an hour before bedtime. For more than twenty years, usually once every winter, I have been seized with a spasmodic cough just before going to sleep, which becomes so severe that I am compelled to get up and sit by the fire. After an hour or two I return to bed and am free from the cough till the next winter. In other respects I enjoy good health. Many years ago I found that one-half grain of codeine, taken about two hours before bedtime, absolutely stopped the attack

and left no unpleasant effect the next morning. In cases of vomiting from almost any cause, one quarter grain doses of codeine usually answer exceedingly well. In the milder forms of diarrhœa one-half to one grain of the drug usually answers most satisfactorily, and there are no unpleasant after-effects."

We find, however, that where there is great pain, the analgesic effect of codeine may not be sufficient, and a combination with antikamnia is required. It is best given in the form of a tablet, the proportions being 4 3-4 grains antikamnia and 1-4 grain codeine. Sometimes chronic neuroses may be cured by breaking the continuity of the pain, for which purpose we have found this combination peculiarly suited.

THE STRYCHNINE TREATMENT OF PULMONARY CONSUMPTION.—Next to rest and food, strychnine in large doses is the most important agent in the treatment of pulmonary consumption. Begin with 1-32 of a grain, and gradually increase to 1-16, 1-10, or 1-6 of a grain, or even larger doses, given four times a day. According to the author, it does not produce albuminnria or diabetes, as is generally supposed. It alleviates the loss of appetite and vomiting, the constipation, the nervousness and sleeplessness, the pain in the chest, the cough and expectoration, the dyspnoea, the weakness of the heart, and acts as a blood-builder in an eminent degree. Its usefulness rests, of course, on its influence over the nervous system, and is another link in the chain of evidence which shows that in the great majority of cases pulmonary consumption is the direct result of primary disease of the pulmonary nerve supply.—Thomas J. Mays, in *College and Clinical Record*.

PAPINE IN IRRITABLE STOMACH.—W. H. Cunningham, M. D., of Butler, Ala., enthusiastically says "Papine" is retained in the most irritable conditions of the stomach and controls nausea and vomiting with more certainty than any other remedy, controlling the vomiting of Gastritis better than Morphine hypodermically. In his hands it has never produced any unpleasantness.

THE HICCUP NUT.—The fruit of this South African plant is locally known as the "hiccup" nut, and by the natives as "Umtandawa." The plant is a climbing shrub with ovate leaves and terminal spikes of dull red flowers. The fruit is an oblong nut with a pleasant flavor, but causes violent hiccough if only a few are eaten. At one time Mr. Wood tried them on himself, and did not care to

repeat the experiment. An allied species, *C. erythrophyl-lum*, Sond., known as "Umduba," distinguished by its papery, four-winged fruits, and its leaves turning almost white before flowering, but reddish in the autumn, is stated by Mr. J. Kirkman to be used as a medicine by the natives in the dose of one-half ounce or less, but an overdose causes death.—Scientific American.

STROPHANTHUS FOR INEBRIETY.—A corpulent old man with a weak heart and intermittent pulse, a confirmed drinker, after being put upon seven-drop doses of tincture of strophanthus three times a day felt very sick, and began to dislike alcoholic drinks, the dislike fortunately becoming permanent. Two other similar cases were likewise successfully treated in the same way. The immediate effect of the strophanthus was to produce nausea and profuse diaphoresis, results which are unusual when this drug is given in ordinary cardiac cases and though alcohol was suddenly discontinued in these three cases no bad results followed.—Dr. Skworzow in *Wein. Med. Press*:—*Med. T. and H. Gaz.*

THE VALUE OF KOLA.—Several very eminent clinicians have epitomized their experience with kola, and, as it were, have summed up in a few words all the salient points observed with regard to the drug. Dr. Dujardin-Beaumets (at a seance of the Paris Academie de Medicine as far back as 1890) states that the numerous experiments made in his laboratory, at the Hospital Cochin and in the services of the Lille hospitals (where Dr. Monnet was formerly chief of the clinic) have all demonstrated the elective action of kola on the general nutrition, and upon the circulation in particular. These experiments have proved that the preparations of kola were possessed of a real potency in cardiac affections, and that the sphygmographic tracings in the monograph of Dr. Monnet very satisfactorily exhibited the tonic effects of this substance.

Dr. Bernard Schuchardt, of Gotha, is the author of a most exhaustive work entitled, "Die Kola-nuss in ihrer commerciellen, Kulturgeschichtlichen und medicinischen Bedeutung" (Rostock i. M., 1891); he thus concludes with regard to its medicinal properties:

"Kola should accordingly be employed as a diuretic in heart disease, and especially in conditions of feeble heart; in neuralgias; in severe fevers of adynamic character and during the period of convalescence after the latter; in exhausting diseases; in dyspepsias; chronic and obstinate diarrhoeas; in cholera; and, finally, as an excitant

and exhilarant, in cases of mental depression."—Therapeutic Notes.

ELECTROLYTIC TREATMENT OF GOUT.—Dr. Labatut ("Gaz. des Hosp.," Dec. 4th, 1894) reports cases in which he has used lithium by the electrolytic method with results much more satisfactory than by the mouth.

ALCOHOL IN NEURASTHENIA.—Graeme M. Hammond, M. D. (*Journal of Nervous and Mental Diseases*) says: The diet to be observed in neurasthenia is a question which deserves a great deal of careful consideration. In many cases the digestive organs fail to perform their functions properly, either because the digestive juices are not secreted in their proper proportion, or else chemical changes in their composition diminish or interfere with their activity. This results generally in quantitative indigestion, that is the inability to digest more than a very limited quantity of food, but sometimes certain classes of foods seem to be discriminated against much more than others.

It is not my purpose in this article to consider the subject of indigestion in neurasthenia in all its aspects, but to confine myself solely to the influence of alcohol on the digestion of the neurasthenic and on the neurasthenia itself.

The free use of alcohol is always more or less injurious to the normal individual, but it is particularly so in cases of neurasthenia. Patients of this description usually find out for themselves that free indulgence in wines aggravates their headaches, increases their insomnia, induces more indigestion than they usually have and augments their general symptoms of discomfort. On the other hand, it has been my experience that small quantities of alcohol, given with the heaviest meal, frequently assists a feeble digestion. More than this, it seems to dissipate, for a time at least, the depression and confusion which so often are prominent symptoms. It is true that alcohol retards the action of pepsin in experiments performed outside of the body, but within the stomach diluted alcohol, in small quantities, seems to stimulate the gastric tubules and thus increases the secretion of the gastric juice. It is the function of the gastric juice to convert proteids or nitrogenous food into peptones. A diminished quantity of gastric juice, therefore, delays or arrests the digestion of meats, albumin and gelatinous foods, all of which are nitrogenous and, as a class, are very necessary in supplying muscular strength and vitality. The gastric irritation consequent upon

indigestion has in itself a depressing effect upon the nervous system. It has long been my custom, therefore, to advocate the ingestion of a small quantity of alcohol in the form of a glass of claret with the patient's heaviest meal. Of recent years I have used one or more of the various preparations of wine of cocoa, as it seemed to me the tonic stimulating effects of the cocoa on the nervous system, together with the gastric stimulation from the small quantity of alcohol, had generally a more beneficial effect than claret alone. More recently I have used maltine with cocoa wine. Here the maltine, which contains diastase, materially aids in the digestion of the starch foods, while the small quantity of alcohol it contains stimulates the secretion of gastric juice and thus assists in the digestion of the nitrogenous substance. On the other hand the cocoa acts as a mild tonic and stimulant to the nervous system, diminishing the irritability and despondency and promoting the gradual restoration of nervous strength. Maltine with cocoa wine is a preparation agreeable to the palate, is a food in itself, assists in the digestion of starchy and nitrogenous foods, and is also a useful tonic to the nervous system. In this form moderate quantities of alcohol can be administered to the best advantage.

LACTOPHENIN.—Dr. Hermann Strauss, of the Medical Clinic at Giessen, Germany, in *Therapeutische Monatshefte*:

1. Lactophenin is a certain, reliable, and (in the overwhelming majority of cases) not unpleasant febrifuge. Compared with the fever remedies hitherto in vogue, Lactophenin possesses an advantage in that no injurious and assuredly no dangerous collateral effects have been shown to follow its use.

2. As an antineuralgic and sedative, judged by experience in the clinic, Lactophenin is at least deserving of a place by the side of similar remedies hitherto used. Its superiority lies in the above-mentioned freedom from noxious collateral effects.

3. With special reference to its application in typhus, it deserves preference to the other medicaments hitherto used for the reason that it has thus far proved harmless, and, furthermore, seems to exert a certain specific calmative influence on the nervous system.—Therapeutic Notes.

COCA ERYTHROXYLON.—The *Provincial Medical Journal*, London, England, says: Much depends upon the plucking of the leaf, and the time at which it is plucked; the subsequent care of the leaf being matter of considerable impor-

tance, and affecting very materially the preparations made from it. M. Mariana was the first in Europe who took up the study of the plant, and over 30 years ago commenced manufacturing for the medical profession the various specialties associated with his name, preparations which have acquired their well-known reputation by their purity and efficacy. The stimulating and strengthening property of the leaf in its natural state has been tested by experienced travelers and botanists during several centuries, and it is this invigorating property which the physician wishes to bring into use, and which he is enabled to do in a palatable form by means of "Vin Mariana," this wine being indicated where there is great depression, long continued exhaustion, and where a special stimulative action is desired. "Vin Marianna" is agreeable, palatable, imparting by its diffusibility an agreeable warmth over the whole body, and exciting functional activity of the cerebro-spinal nerve centres. We have frequently prescribed this wine, and we can, from practical experience, recommend it.

PSYCHIATRY.

MENTAL DISTURBANCE AS A CAUSE OF ZOSTER.—In the *Lancet* for October 13th, Mr. Antony Roche remarks that there are few diseases more interesting than zoster from a physiological point of view, and states that he has been struck with the frequency of its occurrence after some cause that produces mental depression or anger. This, he says, has been noticed by others, and he cites Batman and Schwartz as having recorded such instances. He himself has noted the following cases: 1. A woman suddenly received the news that her husband had been ordered to India, and the next morning the eruption appeared on her left side. 2. An old man learned that a firm in which he was interested had failed, and that evening he noticed the spots on his left side. 3. A woman was much distressed at the sudden illness of her son, and on the following morning the eruption was found to have appeared. 4. A child, six years old, of remarkably equable temperament, was sent to bed for disobedience. She cried very much, and the next morning the eruption was noticed on her left side. 5. The author was recently consulted by a woman whose only son was shortly to be married. She complained of pains in her left side and of an eruption, which turned out to be that of zoster. She herself ascribed the rash to grief at the idea of parting with her son.

NERVE SEDATIVE AND DIAPHORETIC.—*Acetanilid*, 80 grains (5 grammes); *bromide of soda*, 50 grains (3.20 grammes); rub well together in mortar. Sig.: 3 to 5 grains (0.2 to 0.32 gramme) every one, two, or three hours.—B. H. Brodnax, in *Medical World*.

THE "CRANK" PROBLEM.—Dr. C. B. Burr, late Medical Superintendent of the Eastern Michigan Asylum for the Insane, but now Medical Superintendent of Oak Grove, at Flint, Mich., thus pertinently discusses this subject:

There have been admitted during the last biennial period 19 patients suffering from the form of disease known as paranoia. It may be truthfully said that the world has entered upon an era of cranks and crankism. The public has become accustomed to glaring headlines and full-page newspaper accounts of homicidal acts directed against distinguished individuals. A sudden act of homicide is committed, and the public is momentarily shocked. The editor finds in the circumstance a convenient text from which to preach to physicians a sermon upon their duty as conservators of life, and to officials the obligations incumbent upon them to take care of the crank; but though officers of the law may have their duty to do impracticable things pointed out in dogmatic fashion, and though, from the pulpit and press denunciation of the miscarriage of justice is made, the public soon lapses into indifference. The crank problem remains unsolved and history repeats itself. What shall be done with the crank? It would seem that the fallacy of the belief in the "harmless" character of his insanity has been clearly demonstrated, and emphasized in too many soul-stirring episodes to be longer entertained. Too long indulged in his whims and conceits, sent upon fools' errands, encouraged in vagaries, dissatisfied and thwarted in aims which he had marked out for himself, irritability has ensued. The "harmless crank" has become a homicidal insane person. That the public may be fully aroused to the dangers which menace it, and the conscience of society receive additional quickening from the contemplation of the subject of "harmless" lunacy, a description of the disease known to alienists under the name of paranoia seems not inappropriate to a public document of this character.

This is a form of mental alienation found almost exclusively among those whose brains are burdened* through hereditary tendency. It is characterized by primary delusions. It develops without antecedent excitement or depression. It has a fixed constitutional character, but does

*Krafft-Ebing.

not as a rule lead to deterioration of the psychical mechanism; to dementia. It is an evolutionary disease and may be defined as a disease "occurring in one of congenitally defective nervous organization and marked by certain well-defined symptoms which seem to be due to defects of development and frequently appear as an exaggeration of the natural characteristics." Strictly speaking, it is less an insanity than an imbecility of high order. It is the outgrowth of a distorted personality. One suffering from paranoia has been from childhood peculiar. He has developed unsymmetrically, has perhaps shown a genius in certain lines, but inaptitude for persistent effort. He has been scattering and impracticable, possibly precocious in school and in mechanical lines inventive, but possessing certain peculiarities in manner and conversation which bring upon him the designation "eccentric." He is saturated with self-conceit, which in certain cases is conjoined with a degree of shyness. His emotions are easily aroused. He is resentful, is suspicious, and from youth out of harmony with his environment. After some slight illness or disappointment or indulgence, or without assignable cause, the objectionable peculiarities become more manifest. Suspiciousness takes possession of his mind and determines his conduct. Depression never, except incidentally, approaches the extreme degree observed in melancholia; neither are there present delusions of unworthiness or of poison, as in that disease. Later on, however, after the so-called transition stage is past, delusions of poison may arise, these being the logical result of other delusions—for example that the patient's life is threatened by those jealous of his position. What he feels at first in his depression is a sense of impending failure, of persecution, of conspiracy. Perhaps at this period a love affair is broken off, a situation has been lost, or a business venture has proven unprofitable. The misfortune is ascribed by the person to the machinations of his enemies. This the so-called persecutory stage, may not be in all cases so distinct, but is the first in the chain of incidents. Following upon the persecutory stage the period of transition appears. Some event occurs in the person's life which gives him the clue to the mysteries surrounding his past and to the persecution to which he has been subjected, and explains the reason for the trouble which he has undergone. In a case resembling that of Guiteau which was reported by the writer several years ago a visual hallucination was the turning point, this being interpreted as indicating that the patient was inspired and that the power of the Lord had come upon him as upon

Paul. To another patient, now under observation, arrest and incarceration in jail between two thieves gave the impression that his life was destined to a divine purpose similar to that of Christ. The third stage, that of fully developed delusions, is but a step further. From the mysterious happenings, through putting this and that together by a process of reasoning, a delusion is developed, which has a logical basis, a fixed character, and does not yield to treatment. One may fancy that he was born a prince, but changed in his cradle and brought up by lowly people who had in view concealing his identity. Another may believe himself a good statesman, deterred by political influences from reaping the distinction to which his merits and influence entitle him. One may have schemes for empires or kingdoms upon earth, of which he shall be the head. Another may be satisfied with evangelizing the world. The persons reason correctly from false premises, their statements are coherent and rarely confused, their ability to express themselves depending upon natural endowments and the degree of education received. Dementia—acquired weakness of mind—is rarely conspicuous, and many retain until late in life, practically unimpaired memory, and tolerably full possession of original capacity to reason and to judge. With a fixed delusion the individual goes on for years, making a precarious living, perhaps accumulating means through some ingenious invention. As a rule, however, he is too lacking in application to succeed, is neglectful, dissatisfied and meddlesome. In religious profession and politics he is changeable, bowing at the shrine of every strange God. He is the bane of office holders, the critic of the theologian, the editor's adviser. He is called harmless. His neighbors would resent interference with his constitutional rights and attempts to abridge his liberties. A jury would be very apt to see in his conduct not insanity but eccentricity. Being able to express himself correctly, sharp in the conduct of his own case in court, skillful in concealing delusions if self-interest prompts, a jury is reluctant to favor his sequestration, or even to take from his control the property which he is dissipating. He is, as he always was, "just a little off," is said, and the community drifts on unconscious of danger, ignorant of the tyranny of an insane delusion until a bomb is thrown, a shot is fired, a building is burned, in revenge for a wrong or slight. Not infrequently some real basis for the revengeful feeling exists. The individual asserting his claims upon office, has been put off by fair words, has been deceived into the belief that he is about to obtain recognition and that his ambi-

tions are to be realized. Logically and in premeditation he lays plans to rid the earth of the one who has betrayed him and held out promises which he never expected to redeem. "I shall be a public benefactor if I rid the earth of the presence of this man," the paranoiac argues. His sense of self-esteem is tickled by the prospect of notoriety and public applause. He expects to be hailed as the deliverer of the down-trodden. Does he know right from wrong? Unquestionably he does, in the sense in which the legal test is applied. Could he abstain from doing the wrong? Possibly were a sufficiently strong motive applied, or were he placed under circumstances which would relieve his illfeeling. Should he be hanged, or be punished as a criminal? In my judgement not. I am unable to subscribe to the recent legal theory, "Insane, but responsible." Would his punishment have a deterrent effect upon other criminals? In my judgement not. The homicidal act of the patient whose case resembles Guiteau's, and to which allusion has previously been made, was committed in the face of strong public sentiment against Guiteau, and a short time following his execution. The assassination of one distinguished man follows upon the heels of that of another. The second assassin is not deterred from committing homicide because of punishment of the first. He may plead insanity in his own defense in court, but he will wish to have the term applied in a legal sense. He would be regarded constructively insane, not-insane from the medical point of view. He looks upon the plea, in the absence of being able to plead justification on the ground of public expediency, as a good enough excuse by which to escape the gallows, as did Guiteau, or as an easy means to secure a pension, as did a patient of my own.

What should be done with the crank? He should be sequestered and cared for away from his family and home. Outside of asylums such persons menace the safety of society. Of 15 cases of paranoia to which I have had occasion to refer recently, one had threatened the Judge of Probate with a shot-gun; another, in a fit of jealous rage, had assaulted his wife and daughter with a sled stake; a third came to the asylum with a revolver in her possession which she had intended to use against her fancied persecutors; a fourth made a pilgrimage to Washington to obtain from the Attorney General of the United States redress for grievances. One had made such violent demonstrations toward his wife that she dared not remain alone with him. Another assaulted a railroad president because a bit of advice respecting "nickle-plating rails" was not followed,

and because he had failed to receive a desired situation on the road. Another threatened to blow up the city hall with dynamite. One had threatened to do violence to her friends; another to shoot and burn; another had beaten his wife because of the belief that she was conspiring with the priest against him. The twelfth had paraded about dressed in a fantastic suit and carrying a two-edged sword,—this because of desire to appear correctly in the biblical character which he supposed himself to represent.

The public should learn to protect itself from persons of this description. Let officials act where relatives having no appreciation of the needs of the patient fail to act. Let the belief in "harmless insanity" disappear, and let the public awaken to a sense of its responsibility to care for the crank—the individual sane on all subjects but one—the delusion tyrannized paranoiac.

PSYCHICAL DISTURBANCES IN DIABETAS. —Dr. R. Atkins says: The number of nervous complications which occur in connection with diabetes mellitus is very great, i. e., paralysis of limbs more or less complete, disturbance of speech, alterations in sensation, paralysis of the ocular muscles, neuralgic affections, epileptiform convulsions; yet none of these can be considered as pure accidents or coincidences occurring during the course of the primary disease, but must be taken as standing in direct relationship to it. Dr. Jerzykowski (*Nording Lekarski*, 1893, Heft 7, abstr. in *Allgemein. Wiener Med. Zeitung*, No. 136, 1893) has published an article on the psychical disturbances occurring in patients suffering from diabetes, of which he has observed several cases. In one patient, a man aged fifty, there was profound melancholia, with attempts to commit suicide, and in another, an old woman, there was also melancholia. In a third case, that of a widow aged sixty one, there was also considerable mental disturbance. In none of these cases was there any hereditary tendency to insanity. As another instance of the relationship between diabetes and mental affections Dr. Jerzykowski draws attention to the glycosuria which sometimes occurs after sudden mental shock. With regard to the question whether the psychical phenomena are primary or secondary to diabetes, he maintains that in a large proportion of cases they are complications of the disease. He states that the most common of these phenomena are alterations in the intellectual powers of the special senses and of memory. The cases above noted, of melancholia, are not so often met with.

Some little time since I had under observation a gentleman suffering from Neurasthenia, with well-marked mental

depression and psychic restlessness, accompanied by glycosuria, and followed by rapid emaciation and muscular feebleness. As the neurasthenic condition improved, the glycosuria disappeared *pari passu*, and eventually recovery of nervous and muscular power ensued, and the urine became entirely free from sugar.—Dub. Jour. Med. Science.

INEBRIETY.—Morandan de Montyel concludes ("Ann. Medico-Psych. Nov. 1894."): Inebriety is curable in one third the cases, the basis of treatment is complete, compulsory, prolonged abstinence; without this method there is no chance of recovery. This abstinence should be supplemented by treatment of the condition of the nervous system of which inebriety is the symptom. The patient should be placed under military discipline surroundings. And subjected to an efficacious surveillance. The duration of treatment should be a year at least.

APHASIA.—Barnheim states ("Bull. Med. Oct. 1894.") that the sole well demonstrated anatomical localization is that of the foot of the left frontal convolution. Localization of apraxia at the foot of the second left frontal is not sufficiently demonstrated. The first left temporal plays a role in the evocation of acoustic images; it does not represent a centre; it may be nothing but a passage for impressions going from the auditory centre to the centres of ideation. The inferior parietal lobule does not represent a centre; it may be nothing but a passage for impressions, going from the visual centre to the ideational centres. Conductibility plays the greatest role in aphasia. The paths of conductibility may be organically affected by direct lesion, or dynamically by lesions of the neighborhood, cerebral shock or senile enfeeblement.

PYROMANIA IN SAVOY.—Dr. Dumas, the superintendent ("Ann. Medico-Psych." Nov.-Dec. 1894.) of the Bannens insane hospitals has studied his pyromaniacs. He divides them into two categories, in the first, irresponsibility is indisputable. The second class belong to the degenerate and the question of their responsibility must be settled in each case.

INFECTION AS A CAUSE OF MENTAL DISEASE. Mills (*Amer. Jour. Med. Science*) concludes as follows:

1. Specific infection must be included among the causes of mental symptoms and diseases which precede, accompany, or follow febrile and other infectious disorders.

2. Much negative evidence can be adduced in favor of acute delirium or acute mania being due to toxæmia—such evidence as is afforded by autopsies which reveal neither gross nor histological lesions; and in these cases toxæmia probably overwhelms the patient before the production of meningitis or other disease.

3. Analogies with nervous affections which are known or believed to be of microbic origin—such as multiple neuritis, myelitis, and chorea—favor the view that insanities with similar or related phenomena and lesions are also microbic in origin.

4. The evidence afforded by careful bacteriological investigation of cases of acute insanity is thus far meager, and shows that various micro-organisms may induce the same or similar types of mental disease.

5. The mental disorders of pregnancy and the puerperal state are probably, in a considerable proportion of cases, toxæmic, without reference primarily to childbirth; but it cannot be regarded as proved that a bacillus of either eclampsia or puerperal mania is the sole cause of these affections.

TABES DORSALIS AND PARETIC DEMENTIA.—Fournier (Le Bulletin Medical No. 46) calls attention to the intimate relation between tabes dorsalis and paretic dementia.

Many symptoms are common to both diseases, such as motor incoordination, paralysis of ocular muscles, inequality of the pupils, paralysis of the sphincters, sensible and reflex disturbances, trophic lesions, and apoplectiform and epileptiform attacks. Both forms of disease are sometimes combined. Both are rooted etiologically as a rule in lues, and are developed under similar conditions with preference for males of a certain age. Both show a chronic course with remissions. Both resist therapeutics. Both show analogous pathological conditions. Fournier comes to the conclusion that tabes and progressive paralysis are only two topographically different forms of the same disease process, two different localizations of the same morbid state, which can be referred etiologically to syphilis. Three different manifestations of the disease process can be distinguished: 1° That exclusively affecting the spinal cord, or tabes. 2° That affecting the brain exclusively, or dementia paretica. 3° That affecting the brain and spinal cord, or tabes cerebro-spinalis.

A. E. M.

PARETIC DEMENTIA AND SYPHILIS.—Hougberg (*Allgemeine Zeitschrift für Psychiatrie L. Bd.*) discusses at great length the etiology of the progressive paralysis of the insane. After a review of the opinions of different authors on this subject, he goes into casuistical and statistical details and comes to the following conclusions: 1° That paretic dementia is a disease which far more frequently affects the male than the female; and more frequently the population of cities. It does not occur amongst women of the better classes. 2° The etiological importance of Syphilis in paretic dementia appears to be very great, but this disease plays no important role amongst other psychoses. 3° Paretic dementia which occurs as a rule between the 30th and 45th years, appears between four and five years after syphilitic infection. 4° The syphilitic symptoms which precede the paralytic outbreak, are of relatively mild form. 5° In comparison with syphilis, hereditary predisposition, excess in Baccho et Venere and trauma have only a subordinate importance. 6° Of the different forms of paretic dementia, the maniacal appeared most often, then the demential and finally the melancholic form. 7° The prognosis was not favorable in any of the cases. The duration of the disease was four years in 81.8% and two years in 43.4%. Remissions occurred but rarely. 8° Paretic dementia following syphilis shows no particular specific symptoms in its course. 9° No improvement has been observed under antisymphilitic treatment. 10° No changes can be demonstrated *post-mortem* which are of a syphilitic nature.

ARTHUR E. MINK, M. D.

PRIMARY CONFUSIONAL INSANITY.—We do not concur with Prof. Seglas in the paragraphs which we have questioned thus(?).

“The symptoms are both mental and bodily. Among the former, bewilderment, astonishment, hebetude, or the expression inert and stupid. Patient is lost in his responses to questions, appears to be out of touch with persons and things round about him, has difficulty in finding words for his ideas and in comprehending. Thoughts are sluggish and attention is difficult; is distracted and persistently dreams; in a state of doubt and uncertainty; perception and imagination are defective. His disease is not due to disturbances in the elementary sensations, but in the psychological interpretation of these sensations. His memory is weakened. Recollections may be accurate but forced and does not recall events by his own will well. Voluntary movements are hesitating, misdi-

rected, maladroït, etc. In slight cases this inability of action is greatly complained of. Sometimes patient recognizes the confusion in his ideas. Sometimes he has melancholic delusions, changeable and incoherent, or hallucinations. Sudden impulsiveness may occur, then violence, either to himself or another. His docility is generally striking, and some people may manage him easily. Bodily there is general weakness and loss of flesh. Pupils may be unequal. A cataleptic state may set in. Insomnia is almost constant. Two forms are apparent, the asthenic and hallucinatory. The bodily symptoms sometimes predominate, and may be classed as cachectic, typhoid, and meningeal. The onset of the disease is generally rapid. The disease lasts from four to six months. It may end in recovery, chronic dementia or death. It is the only mental disease besides general paralysis which may cause death(?). The prognosis is worse than in mania or melancholia. The more complicated and varying the form, the worse the prognosis(?). Slighter forms must be distinguished from melancholia. The physiognomy is very different from mania. In early general paralysis there is no real confusion of ideas, but progressive dementia. Traumatism, physical and moral, infective disease, excesses, etc., are important occasional causes. Heredity is of less importance than usual in this disease. Confinement in an asylum should be delayed as long as possible(?).”—Seglas in *Arch. gen. de Med.*; May-June, 1894.

AGRAPHIA.—Dr. Pitres concludes (“*Bull. Med.*”) that: There is reason to believe that there exists in persons skilled in using the pen to express their thoughts, a special cortical centre in which are preserved the graphomotor images and which insures current hand-writing. This centre is probably situated in the foot of the left second frontal convolution. Its isolated destruction produces pure motor agraphia. This clinically motor agraphia is frequently associated with motor aphasia. This is explained by the neighborhood of the two centres, but the coexistence of the two symptoms need not necessarily occur. There exist sensorial agraphias. In these the power of writing is affected in all its particulars equally for both hands. In pure motor agraphia the power of copying is usually preserved although writing either spontaneously or under dictation may be lost. The patients can still write with the left hand.

URÆMIC APHASIA.—Dupre (“*Rev. Internl. de Med. et de Chir. Prat.*,” Dec. 10th, 1894”) states that aphasia occurs in the

intoxications (tobacco, santonine) and in the auto-intoxications (uræmia), he has seen in a scarlatinal child motor aphasia with agraphia coincide with temporary anuria. In an old man with renal sclerosis a uremic crisis was accompanied with motor aphasia, and incomplete agraphia. Uremic aphasia may be accompanied or not with brachial monoplegia or right hemiplegia. It is intermittent and variable.

NEUROPATHOLOGY.

CONTAGIOUSNESS OF TETANUS.—M. Le Roy related (*Med. Pres. ann Circ.*) at the Academie de Medicine, Paris, the history of four cases of tetanus which owed their origin to direct contagion. In the first case, the malady was complicated with facial paralysis. The patient slept in a room off a stable where harness was kept of a horse which had died two years previously from tetanus. The disease seized the man four days after the appearance of a small wound on the cheek produced by the stroke of a stone. In spite of antiseptics and the administration of large doses of chloral, the patient succumbed. The autopsy gave only a negative result, and inoculations made with the earth of the stable were unable to demonstrate the presence of the microbe of tetanus. The second case terminated by recovery. A child, at 7, was in the habit of amusing itself a great portion of every day in a stable where a horse had died four years previously of tetanus. He was attacked by the malady a few days after an accident by which his right thumb was severely crushed. The germ of the affection was subsequently found in the soil of the stable. A woman was the third case. She had done up the mattress of the preceding patient, and fell ill a month subsequently, when she got a nail into her foot. She died in three days. The last case was that of a wagon driver, who was carried to the hospital in a horse-rug, the covering being in direct contact with numerous sores on his body. At the end of nine days the patient was seized with trismus and opisthotonus, and in spite of chloral and repeated injections of anti-toxin serum, the man died. M. Le Roy concluded by saying that the above cases proved how frequently the tetanic germ was to be found in stables of horses which had died of the malady, and also the prolonged resistance and lengthened preservation of its toxic properties. Consequently, a rigorous disinfection of all contaminated places should be insisted upon.

NEUROPHYSIOLOGY.

FUNCTION OF THE FRONTAL LOBES,—Bianchi (*International Medical Congress at Rome, March, 30th, 1894.*) presented a paper on the "Functions of the Frontal lobes." He referred to the doctrines of Gall and Bouillaud, and then referred to the experiments of Hitzig, according to whom, removal of the frontal lobes, produced only a mental degradation, which could be referred to a loss of the faculty of attention. He examined then the labors of Ferrier who arrived at about the same conclusions, the researches of Munk on dogs and apes, those of Horsely and Schaefer, and his own made in 1888. He expounded the results that he obtained from extirpation of one frontal lobe, and some details of a dog and ape deprived of both frontal lobes. He proposed the hypothesis, that the frontal lobes are the organs in which the sensorial and motor products of the different cortical zones are coordinated and synthesized.

The frontal lobes elaborate from one side the products of cortical neurons of sense and motion in series; and from the other, all of the emotional states that accompany single perceptions; from the fusion of which arises what we call the psychical tone of a person.

The extirpation of the frontal lobes produces disintegration of the personality, the incapacity to form serially groups of images or representations. With the destruction of the organ of physiological synthesis, we have also lack of the anatomico-physiological basis of judgement and criticism. The inquietude and motor incoherence of animals from whom the frontal lobes have been removed, depends on the resolution of the nervous wave, provoked by the actual impression across the short psycho-motor arc, by want of the psychical coefficient accumulated beforehand.

The fear is the immediate effect of psychical disintegration. It is a defect of the sensation of personality; a defect of perception and judgement.

As the oyster hides itself in its shell on the passage of a cloud, so the ape cries at the apparently hostile attitude of its keeper, and is not capable of divining benevolence in his countenance.

Courage is based on the sense of personal force, on the rapid perception of an adversary's valor, on the means of offense and defense at one's disposal, upon the control more or less of certain sentiments. In the ape, without frontal lobes, we see none of this. The impulsiveness of certain idiots and epileptics should not be confounded with courage. The affections, amicability, intelligence, etc. are

all weakened or lost and avidity and insatiability are augmented beyond measure. The ape that at first was clean, afterward became filthy. The dementia even extended to the sexual life. So is found altogether a dissolution of the psychical personality. The author presented an ape, from whom the frontal lobes had been removed.

ARTHUR E. MINK.

PSYCHO-PHYSIOLOGY.

PHYSICO-MENTAL IMPRESSION.—As illustration of the influence of fear or apprehension upon the vascular system, I give the following case of a highly intelligent lady well known to myself. Although the emotion had for its object another person, it none the less acted, sympathetically, in her own system: One day she was walking past a public institution and observed a child, in whom she was particularly interested, coming out through an iron gate. She saw that he let go the gate after opening it and that it seemed likely to close upon him, and concluded that it would do so with such force as to crush his ankle; however, this did not happen. "It was impossible," she says, "by word or act to be quick enough to meet the supposed emergency; and, in fact, I found I could not move, for such intense pain came on in the ankle corresponding to the one which I thought the boy would have injured, that I could only put my hand on it to lessen its extreme painfulness. I am sure I did not move so as to strain or sprain it. The walk home—the distance of about a quarter of a mile—was very laborious, and, in taking off my stocking, I found a circle around the ankle, as if it had been painted with red-currant juice, with a large spot of the same on the outer part. By morning the whole foot was inflamed, and I was a prisoner to my bed for many days.—T. T. Eskridge, M. D., Denver.

CLINICAL NEUROLOGY.

SPASTIC SYMPTOMS IN PARETIC DEMENTIA.—Dr. Ternel concludes ("Rev. Internl. de Med. et de Chir. Prat.," Dec., 10, 1894.) that the majority of paretic dementes present at an epoch approximating the onset of the disease spasmodic symptoms evinced in exaggeration of the tendon reflexes (82 per 100).

In general there exists a gait characterized by uneven-

ess and jerkness in certain number of cases, movements become truly spasmodic, and may take on characteristics which approximate those sclerosis "en plaques" and the spasmodic paralysis of Charcot-Erb. There often exists also an epileptoid trembling spontaneous or provokable. At a more advanced period there comes on true crises of muscular rigidity with invincible resistance to passive motion, the active movements remain pretty easy in spite of a jerkyness more or less marked. In a small number of patients, permanent contractures appear from the onset, or after transitory periods. These contractures begin in most cases in the lower extremities either symmetrically or unsymmetrically and remain localized, or involve one after the other of the upper extremities. They are noticeable on adduction and flexion. The lower segment of the extremities (fore-arm and leg) remains freest from contractures. The spasmodic paralysis may be complicated by convulsive tremor, intentional tremor, choreiform or athetotic movement, by fibrillary twitchings, paresis or paralysis and by nystagmus. The brain lesions are the ordinary lesions of paresis. Except in exceptional cases or where the spinal cord appears healthy there always exists a more or less diffuse lesion of the lateral columns, in particular, of their posterior parts adjacent to the margin of the posterior horn. The anterior is only exceptionally affected. This spinal lesion may be in continuity with cortical lesions or may be independent; in the latter case it will stop at variable points (at the decussation of the pyramids). The cerebellar fasciculus is often affected. When the posterior columns are affected at the same time as the lateral, the symptomatic totality varies according to the intensity of the lesions, their localization and the period of their appearance. Every spasmodic symptom, the contractures in particular, may be absent or may disappear. Spinal pachymeningitis is frequent. These lesions are particularly marked in most cases with contractures, but not all. They have seemingly the power by themselves to provoke contractures. Often the vessels are clearly the centre of systematized sclerosis. The muscles present atrophy in these particular cases apparently consecutive to peripheric neurites or to lesions of the posterior horn. Paretic dementia may be complicated, but rarely, with other spasmodic neuroses, spasmodic spinal paralysis sclerosis "en plaques" and syringomyelia. Finally there occur permanent contractures due to focal cerebral lesions (hæmorrhages, softenings, or deep cortical lesions) with secondary degeneration of the pyramidal fasciculus.

URINE IN PARETIC DEMENTIA.—Klippel states ("Arch. de Neur., Nov., 1894.") that the general characteristics of urine in the second period are as follows: Polyuria; the urine has a feeble density, is of clear color slightly fecked with mucus. Excretion of urea is diminished and excretion of phosphates is still more diminished. The chlorides are increased, small quantities of albumen are often present, very frequently peptones, and almost always acetone.

ELECTRIC DERMOGRAPHISM IN EXOPHTHALMIC GOITRE.—Drs. Peyron and Noir ("Rev. Internl. de Med. et de Chir. Prat., Dec., 10th, 1894.") state that in certain patients electrified by means of the static machine, there will appear at the centre of the point where a spark has been elicited a white, livid, bloodless point surrounded by a reddish-yellow areola. This phenomena does not appear except in Basedow's disease. The decrease of the symptom occurs with improvement of the patient.

LEPROSY IN THE DEGENERATE.—Dr. Gaucher demarcates ("Trib. Med.," Nov., 21st, 1894.) leprosy in the degenerate from analgesic panaris or Morvan's disease, syringomyelia and other trophoneuroses, with which it may be confounded. Dr. Zambaco is inclined ("Rev. Medico-Pharm., Oct., 31, 1891.") to see in Morvan's disease and syringomyelia but the vestiges of hereditary leprosy.

PARETIC DEMENTIA AND PARASYPHILOSES.—Dr. Fournier demarcates ["Mercredi Med.," Oct. 31, 1894.] paretic dementia from the luetic disorders and places it among what he calls the parasyphiloses. He says concerning these last that they do not depend exclusively and necessarily on lues, as a cause although true luetic accidents never result but from lues as an original factor. There can be no mucus patch, no luetic gumma without acquired or inherited lues. On the contrary, tabes, neurasthenia, hysteria, rachitis, infantilism, hydrocephalus, congenital malformation, arrest of development, etc., which syphilis appropriates so frequently under the title of parasyphilitic manifestations, may be equally produced independently of luetic antecedents or luetic taint. These parasyphiloses are not affected by mercury and iodine as are the true syphiloses. In all respects therefore, according to Fournier, paretic dementia belongs to the parasyphilosis group.

MENINGISM.—Dr. Duprey states ["Prog. Med.," Dec., 1st, 1894"] that this is the totality of the symptoms of acute meningitis, independent of all pathological lesions

recognizable after death. It is characterised by excitation phenomena followed by depression, with vomiting, constipation, headache, and thermic disorder. The causes are primarily infections, intoxication, and nervous causes. The secondary cause is heredity. It attacks specially children and girls, and should be classed as a toxic hysteria. The prognosis is not always favorable.

SENILE PSEUDO-HYPERTROPHIC PARALYSIS.—Dr. Destarac, of Toulouse, France, reports a case of pseudo-hypertrophic paralysis in a sixty-nine-year-old man. Cases at this age are extremely rare.

HYSTERICAL HEMIATHETOSIS.—Dr. Rauzier, of Montpellier, France, reports [“*Prog. Med.*, Dec., 1, 1894.”] a case of this kind, in a nine year old girl.

ARRHYTHMIC CHOREA.—Dr. Lannois divides [“*Prog. Med.*,” Dec., 1, 1894.] arhythmic choreas into three principle groups: 1 Sydenham’s chorea, properly so-called, which is best known, of which are made several varieties; common chorea, paralytic chorea, puerperal chorea, senile chorea, of which last, cases have been reported but rarely. 2 The chronic progressive choreas of which there are two varieties, one in which heredity plays a part, and the other, heredity is absent. The common feature of these two groups is the absence of all but slight histological lesions, temporary in one case, permanent in the others. This distinguishes them from those of the third group where there are very decided macroscopic lesions. These constitute; 3 the symptomatic choreas which are present in three varieties; hemichorea, hemiathetosis, and generalized choreas which are but an extension of the precedent type and observed in parietic dementia, haematoma, and multiple tumors of the dura mater; congenital chorea, double athetosis which cannot be separated the one from the other, are often accompanied by spasmodic rigidity and should be considered as a phenomenon added to the symptomatology of cerebral diplegia.

AUDITORY DISORDERS IN TABES.—Dr. Collet, of Lyons, France, concludes [“*Prog. Med.*, Dec., 1, 1894”] that; Ear lesions are very frequent in the course of locomotor ataxia although it is not possible to determine how far they are products of the neuroses. They may affect the sensory nerve or the ear and especially the transmission apparatus. They may give rise by the subjective noises that they

produce, to a special psychosis, the intermittent persecutory. The electric reaction of the auricular nerve, which has been said to be a frequent phenomena in tabes, is exceptional. There is a frequent relation between the tabetic auditory disorders and disorders in the sphere of the trigeminus.

EDITORIAL.

[All Unsigned Editorials are Written by the Editor.]

Lombroso on Love and Suicide.—It is lucky for one's peace of mind that the distinguished scientist and criminologist, Cesare Lombroso, is officially labelled "Professor of Medical Jurisprudence in the University of Turin." Otherwise he would be an exasperating geographical puzzle. His nationality could never be determined from his musical Italian patronymic alone. Our Maryland Colony, in the 17th century, possessed a medical light named Jacob Lombroso, who was an English jew. The permanent place of abode of the modern Lombrosian luminary, were it not for his Turin tag, would be as nebulous and difficult to fix as his national character. It could never be trailed through his numerous and nimbly changing literary lairs. He flits and floats with his productions through magazines and newspapers published all the way from the Mediterranean to the North Sea. One day it is an Italian, and on the next a French or other European publication, that is the vehicle of his opinions. One week he enriches a medical journal with his scientific conquests, and on the following popularizes them in some newspaper for the masses. At one time he dives into type through the columns of an English or German review, and speedily comes to surface again, like a literary whale, to blow through his favorite organ, the *Paris Revue des Revues*. The latter flourishing lay periodical abounds more than all others with Lombroso's unique semi-scientific displays; and what adds to one's confusion about the learned author's nationality is the correctness and grace of his Gallic idiom, which are enough to excite with envy some of his rivals born and educated on the Seine. But, fortunately, Doctor Lombroso may be run to earth by the curious inquirer, through any one of the modern cyclopedias of biography. These inform us that he was born in Venice in 1836, was professor of mental diseases in the University of Pavia in 1862, was for some time alienist at the head of the Pesano hospital for the insane, and finally, while a member of the Turin faculty of medicine, lighted his famous anthropometric torch wherewith to illumine eth-

nography and to explore, with so much acumen and ability, the depths of the criminal world.

The *Revue des Revues*, in one of its semi-monthly issues for November, 1894, contains a characteristic contribution by Prof. Lombroso, devoted to the exhilarating subject of "Love" and to the equally depressing topic of "Suicide," both in juxtaposed and inseparable association as cause and effect. His production bristles with startling figures and totals, for which the writer has ransacked much of civilized humanity. Nor has he spared, in his comments, the savage and the pagan world. We cannot but applaud his industrious and enterprising collection of statistics as a confidence-inspiring starter for his article; but his well-known mental ingenuity led us to expect much else from the treatment of his subject. Neither in the beginning, at the end, nor in the body of this "Love and Suicide" study, does the reader find any satisfactory attempt to answer the momentous question: "What is love?" Lombroso has strangely dodged a most tempting exercise of his analytical faculties. Moreover, one has the right to expect from a scientific treatise intended chiefly for lay readers, that it shall be prefaced with definitions appropriate to its easy and complete comprehension.

In Italy, according to Lombroso's figures gleaned from the official records, the number of suicides that were committed for causes of all kinds among both sexes in that Kingdom during the last four years, reached a total of 3,085; of which only 569 were of females, against 2,516 of males. In France, a record of 25,941 cases of self-slaughter, collected by him from equally reliable sources, makes man the victim 19,982 and woman only 5,959 times. The great preponderance here shown of suicides among males is ascribed in part to woman's instinctive repugnance to violence and personal disfigurement, in part to the less harassing and responsible role played by her in the struggle for existence, and in part to her mode of life, which is infinitely less tinctured with self-indulgence and vice than that of man. At only one stage of life does the suicide rate among women equal that of males. This period is between the age of 15 and that of 20, when the suicidal impulse is accentuated by the great constitutional change and, as Lombroso contends, by the acute and all-controlling passion of love with its reverses, which female adolescents then experience. During all the rest of life, from childhood to the grave, the male rate of suicide is much higher than the female, and steadily increases with advancing years. This ascendancy undergoes but an insignificant remission during

all the disturbances and dangers of the female climacteric decade, from the 45th to the 55th year of age.

The foregoing statistics exhibiting the marked predominance of cases of suicide from general causes among men, over those occurring among women, are introduced by Lombroso to emphasize the equally great preponderance of female over male suicides, when committed for love. While the male suicides from miscellaneous causes of every kind quadruple or quintuple in number the female, those which are motivated by love alone are four or five times greater in the female than in the male sex. In Italy, he says, 75 per cent. of the suicides among women during the last four years were for love, and only 20 per cent. for the same cause among men. In France, for the same period, the figures showed 28 per cent. of love suicides among the former and only 7 per cent. among the latter. Madame de Stael had noted a similar disparity in the two sexes long before Lombroso, and had given a partial explanation of it by saying that whereas in men love is usually only an incident, an unimportant episode in their busy careers, on the other hand, in women it is the supreme event, often the entire history of their lives. That "men die, but not for love," had not escaped the notice of an earlier and infinitely higher authority; and Brierre de Boismont (*Le Suicide*, 2nd edition, 1865) offered as an apology for this male characteristic, that in men the roots of friendship strike deeper than those of love, and he asked for instances in history where women have ended life by suicide for others of their own sex, as did Volumnius, Petronius and Antonius for their male friends.

Leaving the field of statistics, Prof. Lombroso traverses a wide range of time and space in his industrious search for examples of woman's self-inflicted death for love. He calls up from the slumber of history the *Non dolet* of the wife of Poetus, the fatal swallowing of live coals by Porcia, in order to shorten the supposed period of separation from her dead husband Brutus, and the suicides of the married mates of Poliorcetes, Scaurus and Labeo, all for love. He has learned in a recent book (Twain, 1894) called *Suicide Among the Savage Peoples*, that to the untutored aborigines of North America self-murder was almost unknown, the only suicidal element to be found in any tribe (Dakotahs) being females who occasionally committed the act under the despair and desperation of disappointed love. He relates that in New Zealand, a daughter of the conqueror Hongi, upon learning that her husband had been slain in battle, killed with her

own hand sixteen prisoners and then put an end to her life by suicide. Lombroso reviews the strange mode of self-destruction practiced by the widows of Hindostan and Malabar, who cast themselves upon the burning pyres of their deceased husbands. These suicides, he contends, proceed from love rather than from religious fanaticism, although the teachings of Brahminism powerfully favor the practice of sutteism as well as all other kinds of self-immolation. Two English officers once essayed to deter a widow from this barbarous usage, by asking her first to try the horrible effect of exposing one of her fingers to fire. With a smile of disdain the young woman plunged her whole hand into ignited oil, stoically watched the member burn and just before casting herself into the flames, said: "you may argue as you please; but I know that I belong to no one but my dead husband, not even to myself. Him only did I ever love, and after him I can love no man else."

With grim sarcasm, Lombroso here remarks that under the influence of modern civilization, the widows nowadays expose themselves to flames less painful and deadly. He quotes in this connection the observation of Dante, that the fire of marital love is one that quickly expires unless fanned by sweet kisses and tender looks:

* * * * * poco dura
Se il tatto o l'occhio spesso nol riaccendo.

Whereupon our author again rummages the statistics and somewhere finds the hideous record, that 50 husbands killed themselves rather than survive their beloved better-halves, and that only 14 wives refused to live after the death of their husbands. Holy joys of wedlock! Ladies, what can be the matter with Lombroso?

We have already, in this notice, ventured to indicate the grand hiatus that mars Dr. Lombroso's present dissertation. What love is, has never yet been successfully told in words. Who better qualified by psychological training and experience, as well as by facile and lucid powers of description, to fill the aching void than this Italian dialectician? Failure had hitherto marked the efforts of every human being to define love. Callow and mature sweethearts of both sexes had vainly consulted for relief and inspiration the masters of lofty rhyme, from Sappho and Petrarch to Shakespeare and Byron. Nor had the strains of strongest and sweetest music succeeded in mirroring worthily from nature love's intensity and impassioned delight. Lombroso has here missed the opportunity of a life-time.

WARREN WEBSTER.

Hypnotism.—The recent death of a hypnotised girl, Ella von Salamon, under circumstances pointing strongly to hypnotism as the chief if not the sole lethal agency in her case, has again aroused the attention of the medical fraternity and the public to the possible dangers incident to its use. A clamor has at last been raised by the laity against public exhibitions of hypnotic phenomena designed merely for the amusement and gratification of idle and sensation-loving audiences, and it is demanded that legal restrictions shall be put upon the production of hypnosis, unless for theapeutical purposes, and then only in the hands or under the supervision of duly qualified medical men. Some of the newspaper scribes flatly charge that it is also an agent liable to injurious or disastrous employment by many of the physicians who undertake its use, arising from their want of special knowledge and experience, from their carelessness, or from their abuse of it by too continuous repetition or by its application to inappropriate cases. These enterprising press representatives glibly recite a whole series of mental and physical phenomena which, from interviews with physicians, they have learned are the usual or occasional concomitants of the hypnotic state. They quote loss of consciousness, temporary paralysis of the will-power, muscular tremors, altered pulse rate, disturbed respiration, passing delusions and catalepsy, as phenomena which they fain would have the public view as sometimes hazardous to life as well as health, even when elicited by skilled members of the medical profession.

The day is past for questioning the genuineness of the hypnotic state, and the close investigation and scrutiny of competent and painstaking scientists have satisfactorily established the fact of so-called hypnotic sleep and of hypnotic suggestion; but there are able authorities who stoutly deny that anything has thus far been proved of the value of hypnotism as a remedial agent in disease, beyond its temporary power of relieving pain, inducing sleep and alleviating a few functional ailments of a minor type. There are, indeed, not a few pessimists in our profession who call hypnotic therapeutics of every kind an unsubstantial fad, which has already reached its climax of popularity and is now on the wane. They descry a turning tide and read in its rapid ebb the impending doom of hypnotism as a supposed help to the medical and surgical practitioner.

Despite the dictum of the British Medical Association, which declared in 1892, through a committee selected

to investigate hypnotism, that nothing lent support to the theory of its being "animal magnetism," other authorities aver that hypnotic suggestion, or the psychic enslavement of a hypnotised person to the will and fancies of another, is wholly identical in its nature, and phenomena, with the roles played respectively by Mesmer and his "somnambule" subjects, in the beginning of the present century. These authorities, furthermore, deny to Mesmer the credit of having made this psychological discovery. Paracelsus and other empiricists during the middle ages, and Theophrastus before the Christian era, had busied themselves with the same phenomena. The Persian magi understood and practiced the art of sinking themselves or others into a somnambule sleep, by fixation of the gaze upon some bright object. The Greek oracles and the Roman sibyls owed much of their influence and prestige to jugglery with animal magnetism. Moreover, the priesthood of ancient Egypt, of whom Moses was a pupil, employed in their rude practice of the healing art, mysterious processes akin to those of the modern hypnotists.

If the death of Ella von Salamon, while under the hypnotic influence, shall so focus public alarm and resentment as to effect the legal repression of wanton experiments in hypnosis, and shall so intensify and extend the study and investigation of this extraordinary agent as to expose its dangers, and what is of next importance, explicitly determine its powers and limitations for therapeutical purposes, then the sacrifice of this poor girl's life will have made her a martyr to humanity and to science.

W. W.

The Craig Colony for Epileptics, named in honor of its founder, Oscar Craig, late President of the State Board of Charities, consists of 1,856 acres of land, near Mt. Morris, in Livingstone county, New York. There are upon it 35 or 40 buildings. The colony was established in 1894. Governor Flower appointed a board of five managers, consisting of Drs. Frederick Peterson, 60 West Fiftieth street, New York City, President; Mrs. C. F. Wadsworth, Geneseo, N. Y.; Drs. Chas. E. Jones, Albany; W. H. Cuddeback, Buffalo, and George M. Shull, Mt. Morris, Secretary. George E. Ewert, of Groveland, Livingston county, was appointed Treasurer at a salary of \$200 a year.

The object of the colony is to provide for the four great needs of epileptics which are not satisfied elsewhere:

1. To give them schools where they may attain any degree in education.
2. To provide industrial training of all kinds, for there is no vocation which some epileptics may not follow.
3. To give them a home when all other doors are closed to them.
4. To see that each and every case is carefully studied and treated by the best scientific methods the world affords.

Such objects can only be attained in a community, village or colony devoted to this particular class of cases. There are several such colonies in Europe, but none in this country.

There are about 600 epileptics in the county almshouses of New York State. There are 400 in the state insane asylum. The colony is intended to provide for most of these. When the colony opens, the patients from the almshouses will be the first to be received, and these gradually. The law will not permit of any private patients being admitted until all the patients upon public charge are first provided for in the colony.

It is hoped to open the colony for the reception of a hundred or more patients in the summer of 1895. It is probable that the colony will ultimately number from 1,500 to 2,000 members, and it is certain to become in the course of time a self-supporting industrial and agricultural village. It will more than rival the similar and celebrated colony at Bielefeld, Germany, upon which it is, to a certain extent, modeled.

The Craig colony will not resemble an institution in any particular, but will look more like a country town than anything else. The patients take care of the farms, gardens and orchards, they will plan and build new houses. There will be among them tailors, shoemakers, printers, bookbinders, masons, iron-workers, carpenters, painters, and so on. In fact, every sort of employment, every sort of recreation, everything, in short, that goes to make up the life of any country village, will be found in this colony, the only difference being that the citizens of this community will be epileptics.

The resources of the land acquired are such that there is no doubt, whatever, that in the course of a few years this colony will be more than self-supporting, so that, from the economic standpoint, if not from the philanthropic, the scheme will be a wise one. There are 1,000 epileptics in the state of New York, in almshouses and in the asylums, who are a burden to the tax-payers. These will be placed

in the colony and be made in due time self-supporting.

People of means having epileptics in their families will be allowed to erect cottages at their own expense on the colony grounds, in which the patients can live under the direction and treatment of the physician of the colony.

Marvelous Virtues Reputed to the African Kola Nut.—The State Department at Washington has been calling upon United States Consuls in Africa for specific information respecting the marvelous kola nut, which, it is claimed, by its peculiar action upon the nervo-muscular system, enables the African negroes to make long journeys, bearing enormous loads under tropical suns across difficult country, without food. Robert P. Porley, United States Consul at Sierra Leona, Africa, has sent in the first report on this subject, treating of the means of growing and preparing the nuts. He says that the natives eat the nuts in the early morning as a stay against the wants of ordinary food while traveling, and in the evening to induce sleep. Altogether they consider that a general benefit to the human system is derived from the consumption of the kola, say a single nut morning and evening.

The Term Neurotic, so often misused as a synonym for neuropathic, is employed in its proper sense by Wymal Monk in his new novel, entitled "An Altar of Earth."

He makes one of his characters say: * * * "in the alleys and back streets of East London we have a reserve force of nervous energy that will one day regenerate the world. Compared with the marvelous vitality that surmounts hunger, ill usage and disease, the lauded refinement of the West appears impotent and corrupt. The latter are the finer race, I grant you, but they lack nerve force, and dissolution has commenced. Their birth-rate lessens year by year. In the time to come these tall, clear-limbed, apathetic men and women who fill palaces of Mayfair and Belgravia will appear no more. *Their places will be taken by a more neurotic and enduring race.*" This is similar in meaning with the common expression "*nervy*" and contains no suggestion of that neuropathic instability and degeneracy of nerve element, which are sometimes erroneously spoken of as neurotic.

Suggestive Therapeutics in Psychopathia Sexualis.—There is soon to appear from the well-known

publishing house of The F. A. Davis Co. a translation of the work entitled "Suggestive Therapeutics in Psychopathia Sexualis," edited by Dr. A. Schrenck-Notzing, of Munich, collaborator with Krafft-Ebing. The book will be sold by subscription only, at \$2.50 per volume.

Southern Surgical and Gynecological Association.—The Seventh Annual Meeting of this Association was held at Charleston, S. C., November 13th, 14th and 15th, 1894. A full program was presented, in which were many interesting and valuable papers.

Women in Public Institutions—a Good Recommendation.—The newly elected Governor of California, James H. Budd, favors having a woman in every state institution where women are confined. This is as it should be, but will not our governors and legislatures, now that women are justly coming to the front in all proper parts of human work and duty, favor a woman assistant physician, and matron, for all institutions where children are cared for by the state, especially in the schools and homes for the feeble minded where the gentle hand and tender heart of a woman may help to care for these children of misfortune?

We are too much of a man to favor women taking executive lead in these institutions, but there certainly are for them places in the hospitals for the insane, homes and schools for the feeble minded, lying-in hospitals, female departments of all hospitals, penal reformatories and city jails. The schools for the deaf and dumb, too, should have a good share of woman teachers, for if the pupils in the latter are to be best taught how "to speak out," certainly the women can teach them.

Errata.—On page 454, 14th line, of the October, 1894, number, read: "Buddha being the incarnation of Vishnu," instead of "Siva Vishnu being the incarnation of Brahma."

The Sweedish Movement Cure, or the mechanical massage treatment of Zander, is in successful operation in St. Louis under good professional and business management. Physicians can order such massage at the institute as they may desire for their patients, or they may safely trust their cases to the judicious, discretional care of the medical man in charge. We have visited the institution and speak with faith and confidence from personal observation and acquaintance.

Aerated Bread Still Made in this Country.—

In a recent number of the *Scientific American* Dr. H. A. Buttolph, well-known to the readers of the ALIENIST AND NEUROLOGIST, defends his title of priority in the introduction of aerated bread into the insane hospitals of the United States, in the following note :

Referring to an article in your last number, page 359, on the subject of aerated bread, I beg to state that the process of bread making by this method was introduced by me, as the medical superintendent of both the State Hospitals for the Insane in New Jersey, at Trenton and Morris Plains, many years since—at the former thirty and the latter eighteen years ago, or when it was opened in 1876, and that it has been continued in both without interruption to this date. The number of inmates, sane and insane, now supplied with bread in the two institutions by this process is about 2,500. The bread is tender, light, sweet and, so to speak, mechanically clean, as the materials are not touched by the hands during the process.

The method used differs from the Daughlish system mentioned. Instead of charging the water for mixing the flour with carbonic acid gas, the latter is supplied by a force pump to the dough during the process of kneading, in the usual cast iron globular vessel.

Regarding the process, as I do, as the greatest improvement in the culinary art made during the century, it seems surprising that it is not in general use:

It is presumed that the two State hospitals mentioned are the only ones in the world in which aerated bread is made.

H. A. BUTTOLPH, M. D., in *Scientific-American*.

Short Hills, N. J., December 8, 1894.

To Our Subscribers—The Index Medicus.—We have learned with regret that the *Index Medicus* is to be discontinued with the publication of the February number, owing to lack of support and delinquent subscribers, unless an effort is made to continue it.

The value of this publication to those who do any work at all in connection with medical literature is so great that we take the liberty of soliciting to you not only become at once a subscriber, but to earnestly urge others of your professional friends to do so.

It is particularly necessary that *The Index Medicus* should be continued, owing to the fact that after the completion of the supplementary volume of *The Index Catalogue* of the Surgeon General's Library there will be no record of contemporary medical literature and he who desires to keep pace with it, or who wishes to study a particular subject, will have to resort to the laborious task of seeking in various journals that which he desires if the publication of *The Index Medicus* ceases.

It will be possible to continue *The Index Medicus* if 500 new subscribers are obtained. The subscription price is \$10 per annum, which should be sent to Mr. George S. Davis, publisher of *The Index Medicus*, Box 470, Detroit, Michigan.

We earnestly hope that the importance of this matter will attract the attention and support of our many subscribers, who are men of research, many being writers of distinction, to whom this valuable publication is indispensable.

Respectfully,

THE EDITOR.

Dr. John H. Callender, for 25 years Superintendent of the Central Hospital for the Insane, Nashville, Tenn., has resigned to engage in private enterprise, and Dr. J. A. Beauchamp was elected Superintendent to succeed him. Dr. Callender has been expert witness in many noted cases, including the Guiteau trial and the Mitchell-Ward case at Memphis. He was President of the Section of Physiology of Centennial Medical Congress in 1876, and has been President of the Association of Superintendents of American Hospitals for the Insane. He is an accomplished physician and thorough gentleman, and has, beside, executive business qualifications of a high order.

The Artistic Mantel (New Design) in the reception room of our new office on Olive and Vandeventer Ave. was made by a firm, E. Hand & Co., 2618 Franklin Avenue, St. Louis, we can most cheerfully commend for beautiful, unique and perfect work in the line of wood-mantels, grates and tiles, open fire-places, andirons, fenders, fire-sets, wrought-iron and brass goods, and at moderate prices.

Medico-Psychological Association of Great Britain and Ireland was held at the rooms of the Association, 11 Chandos Street, Cavendish Square, on Thursday, November 15th, 1894, under the Presidency of Conolly Norman. F. R. C. P. I.

Papers were read by Dr. Goodall and Dr. Bullen on "Intercurrent Diseases and Insanity"; by Dr. Campbell on "The Breaking Strain of the Ribs in the Insane: An Analysis of Fifty-eight Cases treated with an Instrument specially devised by Dr. Mercier"; by Dr. Neil, "Three Cases of Recovery from Melancholia after unusually long periods." The following as candidates for admission as

ordinary members were elected: Henry Edmund Blandford, M. A., M. D., B. Ch., Univ. Dubl., Portland House, Bedford Park, Croydon; Louis Buggy, L. R. C. S. I. and L. R. C. P. I., Assistant Medical Officer, District Asylum, Kilkenny; Emil Wilhelm Lindell, M. D., Univ. Upsala, Assistant Physician, Royal Asylum, Gothenborg, Sweden; Edward H. O. Sankey, M. A., M. B., B. C., Cantab., Resident Medical Licensee, Boreatton Park Licensed House, Boreatton Park, Baschurch, Salop.

Fletcher Beach, the regular incumbent filled the post of Honorary General Secretary.

A Medical View of Modern Fiction.—Our esteemed contemporary, *The American Médico-Surgical Bulletin*, whose talented editors, Drs. Wm. Henry Porter and Frederick Peterson, are well-known to most of our readers, thus discourses on this interesting subject:

Among physicians, "The Heavenly Twins" is looked upon, not as a literary venture to be judged by artistic standards, but as a readable presentation of symptoms which suggest definite pathological conditions.

"Ships that Pass in the Night" is admirable as a pulmonary record, and "The Yellow Aster" affords an insight into the psychic phenomena resulting from neglect of natural instincts and desires, which, surviving the appropriate period of life, subsequently assert themselves in the form of belated maternal love and *ex post facto* philoprogenitiveness.

In the latter work, the mother of the heroine allows her children to grow up without receiving a single sign of maternal tenderness, but is overtaken before her death by a most singular form of retribution—a sudden and consuming desire for the society of babies and an overpowering craving to lavish upon children the accumulated stock of motherly love which had not found its appropriate and seasonable outlet. Most of the infants in the neighborhood being provided with mothers, who supply the required amount of caresses, the unfortunate woman dies of a plethora of pent-up baby-talk and unexpended maternal affection, but is happily given time to warn her daughter against a similar fate.

As to Miss Harraden's book, while we find it useful in the profession for its glimpses into refined sick room conversation and pulmonary *persiflage*, we regret, from a medical point of view, that after giving such a careful history of the heroine's case, the author permitted her to be killed by an omnibus. It is humiliating, after following attentively the course of the disease, and the method of treatment, to be dismissed without hearing the result of the autopsy. Moreover, we found her style so delightful that we would have gladly followed the hero to his last hæmorrhage; but that, too, was denied us.

Sarah Grand's cases are open to the same objection of incompleteness. She starts out enticingly with such a character, for instance, as Edith's

husband, but leaves the later and more interesting phases of his pathological history untold. As a general rule, however, she comes up to the requirement of modern fiction: the cases of most of her characters can be diagnosed; and with a little more clinical experience we have no doubt that her future novels will be above reproach. She will stand unchallenged as the novelist of venereal diseases, just as Du Maurier is first in the fields of hypnotic romance, and Beatrice Harraden in the department of laryngeal and pulmonary complaints.

There is danger lest, in the first stages of the medical movement in literature, young writers will attempt to cover too wide a pathological area in their novels, and forget the inexorable law of specialism that obtains in the medical profession itself. The specialistic tendency in medicine must prevail in medical fiction, or the results will be unreliable and superficial. There are neurotic episodes in Mrs. Grand's otherwise consistently venereal work, which we cannot condone. To introduce a paretic or ataxic patient in a dermatological novel would not only destroy the unity of the story, but would justly expose the author to a suspicion of a want of thoroughness. If the writer has determined upon appendicitis as his plot, he should not waste his energies upon irrelevant diseases in his minor characters. He could gain variety by introducing other forms of enteric disorders, but should never exceed the limits of the abdominal region. Until he has had a thorough medical training, we think the course of a single disease should supply him with all the medico-literary material that he can handle in an intelligent manner. A blow on the head supplied the author of "God's Fool" with all the plot that he needed; Ibsen's "Ghosts" is simply the dramatization of an inherited brain disease; and many a successful short story is based upon a case of simple mania with delusions. There will be time enough for the combination of various ailments in a single work when each of the departments of pathology has its special novel. The task will then be easier because the author can gather the fruits of the labors of others; but, at present, there is no excuse for such a sacrifice of unity and thoroughness. We have no novel of the ear, no drama of the digestive organs, no romance of the kidneys, no pastels of the intestines; and these are only a few of the countless fields for literary and artistic honors.

There are some who will sneer at this, as if the organs of the human body were unfit themes for artistic literary treatment. Ridicule will be thrown on the pioneers of the movement; of course, that is to be expected; but they will persist, nevertheless, and eventually succeed. Not only will the novel of the future contain an ever-increasing amount of medical material, but there are signs of a similar tendency in poetry. Anatomical verse is even now not uncommon, nor is it without serious intent, as is shown by the following stanza describing the mechanics of phonation:

"The larynx now goes up;
The pharynx with a slam
Ejects the note
From out the throat
Pushed by the diaphragm."

Status of Courts regarding the Pay of Expert Witnesses.—[14] An expert witness cannot be compelled to give his opinion as an expert, unless he is compensated. He cannot be punished for contempt in refusing to appear or testify as such without he is compensated, but he can be compelled to appear and testify to facts within his knowledge, the same as any other witness, without compensation above the statutory fee to which any witness is entitled:

Buchanan v. State, 59 Ind., 1; s. c. 26 Am. Rep., 75; 17 Alb. Law J., 242; Dillis v. State, 59 Ind., 15; Webb v. Page, 1 E. & K., 23; Parkinson v. Atkinson, 31 L. J., (N. S.), C. P., 199; *In re Roelker* Sprague, 276; People v. Montgomery, 13 Abb. Pr., (N. S.), 207; United States v. Howe, 12 Cent., L. J., 193.

The Courts of Alabama and Texas have held that experts are not entitled to extra compensation:

Ex parte Dement, 53 Ala., 389; *Sumner v. State*, 5 Tex. App., 365.

But the weight of authority is otherwise. This subject has been exhaustively treated by Lawson in his work on Expert and Opinion Evidence, and by Rogers on Expert Evidence. The medico-legal authors all treat it, but in a general way. Among them:

Wharton & Stille, (1882); Dean, (1873); Elwell (1881), (1887); McClellan, (1872); Ordranax, (1869), (1878); Medico-Legal Papers, series 1, 2, and 3, (N. Y.); Taylor (all Eng. and Phil. editions); Woodman & Tidy, (1876), (1884); Naquet's Legal Chemistry, 1876; Taylor on Poisons, 1875; Field's Medico-Legal Guide, 1882; Reese, Med. Jur. & Tox., 1884, 1889, 1891; Bucknill & Tuke, (all editions).

The law authors on Evidence, (Wharton, Starkie, Greenleaf, Taylor, Best, Wood,) all treat the subject in their works on Evidence, to which the student and the expert should refer; vide also Prof. Washburn's paper in 1 Am. Law Review, 62.

[For references to authorities and decisions, the American and English Encyclopædia of Law and Abbott's New Digest are the best sources of information.]—*Expert and Opinion Evidence*, CLARK BELL, ESQ., before the Section on Medical Jurisprudence Pan-American Medical Congress.

Lippincott's Magazine for February, 1895. In the February issue of Lippincott's, "The Chapel of Ease," by Harriet Riddle Davis, is a pleasant, peaceful story of rural life in Maryland, and of a young widow's somewhat complicated love affair. Francis Lynde in "Quong Lee,"

shows that there are some good Chinamen. "A Precedent," by Alice M. Whitlock, narrates an unusual incident in a home for aged clergymen and widows of clergymen. In "An Idyl of the Forties," Champion Bissell points the consoling moral that men should marry the daughters of their first loves. "The Fate of the Farmer," by Fred Perry Powers, is an instructive essay on the growing evils of agricultural tenancy; and David Bruce Fitzgerald, in a brief and readable article, tells all that most people need to know about "The Diamond-Back Terrapin." Corpus Christi in Seville," "A Walk in Winter," "Lingo in Literature," "The Pleasures of Bad Taste" and "The Beginnings of a Cavalry Troop," with a sprinkle of poetry, make up the table of contents of an interesting number of this popular magazine.

Experimental Psychology in France.—Of late years, in France, a great scientific movement has come about in favor of experimental psychology. While the professors of her High Schools and Universities are continuing to teach an antiquated science, whose only method is that of introspection, there has arisen on all sides in the philosophical reviews, and even in journals strictly medical, a body of work in which the investigation of mental phenomena is conducted according to the methods of natural science. Incontestably, the forerunner of this activity in psychological inquiry was M. Taine, who published in 1869 an important treatise upon "The Understanding."

The real inaugurator of the psychological movement proper, is M. Ribot. The psychologists of France owe much to M. Ribot. Without him, without the *Revue*, (The *Revue Philosophique*), which he founded, without the work and results of foreign investigation which he has made known in France, many scientists would never have thought of devoting their attention to psychological research. By instituting a chair at the Sorbonne, and subsequently, at a quite recent date, at the College de France, M. Ribot has helped to give an official consecration, in that country, to the study of experimental psychology. Some few years past, in conjunction with M. Charcot, M. Ribot founded a Society of Physiological Psychology which now counts more than fifty active members. In drawing together men of different professions, in bringing the psychologist into communication with the physician, the alienist, the mathematician, and the linguist, that society has fathered a great number of important productions and sub-

stantially contributed to the developement of the science of psychology.—Abstracted from introductory to “Double Consciousness,” by ALFRED BINET.

Antiseptics have a value of hygiene and preventive medicine which gives them a particularly important place among drugs, and demands universal attention at the hands of the physician and the people. It is largely by these that contagious and infectious diseases may be prevented, and by these also that they may be cured. We find that the infective ingredients of Pasteurine are capable of arresting the life of germs or destroying them—acting equally well on the aerobic and anaerobic germs, and on mucous membranes, mouth, alimentary canal, etc., it is unequalled.

Memorial Statue to Charcot.—The pupils and former associates of Charcot in Paris, and throughout France, are engaged in raising a fund for the erection of a bronze statue of him in the Salpetriere. This movement is now receiving cordial and material support in Germany, in England and in Italy.

It has therefore seemed desirable to the Neurological Societies of New York and Philadelphia that the profession in America join in this testimonial as an evidence of the eminent services of Charcot in Neurology and Medicine. For this purpose the undersigned have been appointed a committee to bring the matter to the attention of the profession and to receive contributions, which will be duly acknowledged and forwarded to the Central Committee in Paris. It is requested that all who desire to contribute to the success of this undertaking send their subscriptions to the members of the Committee nearest them, or direct to the treasurer, Dr. C. A. Herter, 819 Madison avenue, New York, before the first day of February, 1895.

For New York, Drs. E. D. Fischer, E. C. Seguin, M. A. Starr, C. L. Dana, C. A. Herter; for Philadelphia, Drs. S. Weir Mitchell, Wharton Sinkler, Charles K. Mills; for Boston, Drs. J. J. Putnam, P. C. Knapp; for Baltimore, Dr. William Osler; for Chicago, Dr. Archibald Church; for St. Louis, Drs. C. H. Hughes, F. R. Fry, L. Bremer; for Montreal, Canada, Dr. James Stewart; for Rochester, Dr. E. B. Angell; for Buffalo, Dr. J. W. Putnam; for Pittsburg, Dr. Theodore Diller; for Denver, Dr. Howell T. Mershing; for San Francisco, Dr. J. D. Hirshchfelder.

CORRESPONDENCE.

Priority in Craniotomy and Microcephalus.

GRAND RAPIDS, MICH., Nov. 5, 1894.

To the Editor:—I desire to state through the JOURNAL that craniotomy for microcephalus is as distinctly American as ovariectomy and several other operations instituted in this country for the benefit of humanity. I take issue with Prof. Carl Beck in his paper published in the JOURNAL, October 27th, and November 3rd, on two points; 1, in his statement that Lannelongue of Paris, is *the pioneer*, if I understand the meaning of this word aright to be the man who moves in first. This point, however, does not afflict me since in point of time the date of my operation obliged him to place me first upon the list of operators. I reported two cases in the same paper dated 1878, which was widely circulated in several countries and severely commented upon by both the medical and secular press. I have operated altogether five times for mental defects, with no deaths. A perusal of my paper will, I think, convince any one that I took care to make a careful diagnosis and that I was at the time conscious of the causes which produce mental imbecility, that my deductions were rational, and that I gave these cases the same careful attention that I give to any case in general practice, for which reason I demur against being set before the profession as an experimenter and human vivisectionist.

Between the years 1876-78, I read several papers upon affections of the brain before the Montreal Academy of Medicine, which were warmly discussed by such men as Dr. R. P. Howard, Dean of the Medical Faculty of McGill College; Dr. Henry Howard, Superintendent of the Long Point Asylum; Dr. Wm. Osler, of Johns Hopkins, Baltimore; Drs. Hingston, Bass, Boddick. Fenwick, and Dr.

Casey Wood, now of Chicago; all eminent men in the profession and severe critics, in the presence of whom it is not reasonable to suppose that I would present a radical departure in any department of medicine, as surgery unsupported by an adequate *rationale*.

Furthermore, I lay claim to the originality of the introduction of veratrum veride and morphia in the treatment of convulsions and puerperal eclampsia, and of pointing out that these symptoms are caused by arterial spasm and anemia of the nerve centers. I tapped the ventricles of the brain at this time, and discovered sometimes that there was no fluid in cases in which I had expected to find an effusion, which led me to the discovery of a distinction between the coma of compression and the coma of irritation, which was published and, as far as I know, has not been noticed by the profession, though the importance of this distinction ought not to allow it to fall into neglect since the latter class of cases are amenable to treatment successfully by medicine, while the former are, for the most part, hopeless, unless we may expect something by surgical interference.

Yours very respectfully,

WILLIAM FULLER, M. D.

ANTIKAMNIA.

ST. LOUIS, MO., Nov. 19th, 1894.

C. H. Hughes, M. D.

Dear Doctor:—We have yours of Saturday in the matter of the unfortunate error made in your last issue. As we said before we freely acquit you of all desire to do other than serve us, but you certainly must have looked hastily at our "recalling" circulars, since in all of them explicit reference is made to the powdered form.

Why, Doctor, we could not withdraw that if we wanted to; the profession would not allow it, as it outsells all other forms combined. Sincerely yours,

THE ANTIKAMNIA CHEMICAL CO.,

Dict. F. A. R.

Frank A. Ruf, Pres. and Treas.

The above explains itself—Antikamnia in powder form

has not been withdrawn; it has come before the profession to stay, with all their pharmaceutical specialties.—
Editor A. AND N.

The following circular will show that the Company only recalls old forms of packages to be replaced with new forms. This is done to circumvent their substitutors and imitators:

ST. LOUIS, MO., Nov. 22nd, 1894.

Dear Doctor:—The following item appeared in the last number of the ALIENIST AND NEUROLOGIST, Dr. C. H. Hughes, Editor:

Antikamnia.—The adoption of the monogram on the new tablets and the recall of all the old stock from the market, will prove of benefit to this firm and the many physicians who may hereafter desire to afford relief by its use. It will henceforth be sold only in tablet form.

This item appeared in all friendliness to Antikamia, than whom no better friend exists than Dr. Hughes, and the first paragraph is a succinct statement of an undoubted fact. It is to the last sentence we call your attention particularly, and which, if permitted to go unnoticed, will mislead and injure the demand for "Antikamnia Powdered," its most popular form. The changes in style of packages and form of tablets in no sense changes Antikamnia, nor withdraws "Antikamnia Powdered" from the market, which remains now as always, and in stronger demand than ever.

We trust you will bear testimony to this fact "both in and out of season" whenever opportunity offers.

Sincerely yours,

THE ANTIKAMNIA CHEMICAL CO.,

Frank A. Ruf, Pres. and Treas.

HOT SPRINGS, ARK., Nov. 30th, 1894.

Dr. C. H. Hughes, Editor, St. Louis, Mo.

Dear Doctor:—I beg space in the valuable columns of your journal to thank the doctors, their wives and friends for the beautiful present they so generously remembered me with.

Yours truly,

MRS. LYMAN L. HAY.

On November 23rd the wheels and flying sparks took from me the most enthusiastic and charming assembly of people it has ever been my good fortune to know, and after many miles lay between us, I received an exquisite token, a circular pin, of richest gold, with a diamond in the center. Its rays showed me plainly the brilliancy of the givers.

Yours appreciatively,

LOTAWANNA F. HAY.

IN MEMORIAM.

DR. GEORGE CULVER PALMER, late Medical Director of Oak Grove, died, August 17th, 1894.

Dr. Palmer was identified with Oak Grove since its inception and the moving spirit in its growth and developments, as the directors proclaim, alive to its interests and deeply imbued with the necessity and importance of its work, his loss is keenly felt not only by his associates on the Board of Directors, but by the many patrons and friends of that institution. He was always tender, sympathetic and sincere.

Dr. Palmer was born December 27, 1839, in Stonington, Conn. He received his preliminary education at Suffield, Conn., where he prepared for Brown University. Subsequently changing his plans he entered the literary department of the University of Michigan, and there spent three years. He graduated in medicine in the medical department of the University of Michigan in 1864, and immediately afterward received an appointment in the Michigan Asylum for the Insane, Kalamazoo, then under the superintendency of Dr. E. D. Van Deusen. He served upon the staff of that institution as assistant physician and assistant medical superintendent until March, 1878, when he became medical superintendent. In 1891 he resigned the latter position and was elected medical director of Oak Grove, which under his wise and beneficent administration has abundantly fulfilled the high destinies which its promoters had in view.

To Dr. Palmer is due the merit of originating and developing the colony system of management of the insane, and to his writings and his personal work the successful establishment of State care in Michigan is in a great measure attributable. He was the uncompromising foe of the county system, and for his assistance in the great reforms wrought in the treatment of the mentally diseased, suffering humanity may long cherish his memory.

He was self-sacrificing and philanthropic, and beloved by all who knew him well. His life work was well done.

This tribute to his worthy memory comes from those who knew him well and could best judge of his worth as a physician and a man. We need add no more than to say our knowledge of Dr. Palmer only gives confirmation to its truth.

REVIEWS, BOOK NOTICES, ETC.

THE PHYSICIANS'S WIFE; AND THE THINGS THAT PERTAIN TO HER LIFE. By ELLEN M. FIREBAUGH. With portrait of author and 44 photo-engravings of original sketches. In one Crown Octavo volume of 200 pages. Extra Cloth, \$1.25 net. SPECIAL LIMITED EDITION, first 500 copies, numbered and printed in photogravure ink on extra-fine enamelled paper; bound in Half-Leather and Vellum Cloth, \$3.00 net. PHILADELPHIA: THE F. A. DAVIS Co. PUBLISHERS, 1914 AND 1916 CHERRY STREET

This is an entertaining and true narration of life in the practice of a country doctor, as it effects and is influenced by, the wife, with its pathos, its pleasures and its pains.

The woman who writes it is winsome, witty and wise in her manner of treating and in her selection of the several themes.

She is at times truly pathetic, justly philosophical and always smart. While some of its bedside experiences will touch you tenderly and move you to thank God that you have been permitted to bend over the suffering form in the capacity of a ministering physician; others will turn your thoughts into channels of narrating laughter. If you have "been there" as a physician, pages 177 et sequitur to 181 may pain you, but the pump story will please you and, on the whole, you will be improved and recreated for having read this book, and it is the book of a doctor's wife and there is one doctor's wife that ought to be dear to every doctor unless he should have had the poor sense and foresight in the beginning to have foregone the pleasures of matrimony which in the doctor's household are too much one sided.

The author gives Cathell a justly merited lig for his omission to mention the essential part of a doctor's success that rests with the wife. The doctor's wife may make or mar the doctor's future. By her fortitude, her self abnegation, her hopefulness, her christian charity and kindness, she doeth the doctor and his patients good like a medicine.

This book has carried us back to the time when we were a village doctor and recalled its hopes and disappointments, its promises and failures of fulfilment, its rewards, its pleasures, its pains, its triumphs and trials, its moral, pecuniary and social lessons, its knowledge gained of man and manner, of time spent and money lost, and has set us to thinking upon the experience a physician gains of the strength and weakness of human hearts, of closeted skeletons and family secrets, of hearts broken, hopes deferred, ambitions blighted, of sufferings that make strong and purify, refine and strengthen, of experiences that debase, demoralize and degrade the image of God. She has carried us back over a life which has been one constant revelation of the mysteries of human mind and heart.

SUCCESSFUL USE OF ARSENITE OF GOLD IN TWO CASES OF NERVOUS DISEASES. (ARSENAURO.) By J. Alexander Wade, M. D., Danbury, Connecticut. Reprint from New England Medical Monthly.

Results in these cases were eminently satisfactory and confirm the general expressed good opinion of the new therapeutic candidate for professional honors.

OBSTETRIC SURGERY. By Egbert H Grandin, M. D., Obstetric Surgeon to the New York Maternity Hospital, Gynecologist to the French Hospital, etc.; and George W. Jarman, M. D., Obstetric Surgeon to the New York Maternity Hospital, Gynecologist to the Cancer Hospital, etc.; with Eighty-Five (85) Illustrations in the Text and Fifteen full-page Photographic Plates. Royal Octavo. 220 Pages. Extra Cloth, \$2.50, net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry Street.

This is a thoroughly readable and eminently practical book with eighty-five illustrations and fifteen photographic plates. The Authors, Doctors Egbert H. Grandin and Geo. W. Jarman, have written the book from the standpoint of ample clinical experience and have in the valuable book, anticipated and provided for the grave emergencies of obstetric surgery in a manner that will prove on perusal of service to the tyro as well as the veteran in obstetric practice.

TEXT-BOOK OF HYGIENE: A Comprehensive treatise on the Principles and Practice of Preventive Medicine from an American standpoint. By George H. Rohe, M. D., Professor of Therapeutics, Hygiene and Mental Diseases in the College of Physicians and Surgeons, Baltimore; Superintendent of the Maryland Hospital for the Insane, etc. Third edition. Thoroughly revised and Largely Rewritten, with many Illustrations and Valuable Tables. Royal Octavo, 553 Pages. Cloth, \$3.00 net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry Street.

This is a good book for all sanitarians, written by a good writer and competent medical observer.

CHOREA AND CHOREIFORM AFFECTIONS. By William Osler, M. D., Fellow of the Royal College of Physicians, London; President of the Association of American Physicians; Professor of Medicine Johns Hopkins University, and Physician-in-Chief Johns Hopkins Hospital, Baltimore. Formerly Physician to the Infirmary for Diseases of the Nervous System, Philadelphia. Price \$2. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut Street.

A good book by a good clinical observer.

PRACTICAL URANALYSIS AND URINARY DIAGNOSIS: A Manual for the Use of Physicians, Surgeons, and Students. By Charles W. Purdy, M. D., Queen's University; Fellow of the Royal College of Physicians and Surgeons, Kingston; Professor of Urology and Urinary Diagnosis at the Chicago Post-Graduate Medical School. Author of "Bright's Disease and Allied Affections of the Kidneys"; also of "Diabetes: Its Causes, Symptoms and Treatment." With Numerous Illustrations, including Photo-Engravings and Colored Plates. In one Crown Octavo volume 360 pages, in Extra Cloth, \$2.50 net. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry Street.

This is a practical and exhaustive manual on a subject too much neglected by the practitioner.

The first part of this work teaches not only how to detect, isolate and determine the constituents of the urine, normal and abnormal, but also to determine the presence of disturbed physiological processes, to detect the presence of pathological changes, and to measure the degree of both.

The second division treats of Urinary diagnosis, and is a description of the special features of the urine that indicate the presence of special pathological processes in progress in the economy, whether they be local or general, medical or surgical, together with a brief enumeration of the leading clinical symptoms of each disease, and, in most cases, an epitome of their nature and etiology.

In an appendix, the subject of urinary examinations for life insurance is taken up and much information given which is alike valuable to the medical examiner for life insurance and the clinician.

D. S. B.

CASTRATION OF SEXUAL PERVERTS. By F. E. Daniel, M. D., Editor of Texas Medical Journal, Austin, Texas.

We hope this subject will be kept before the profession and people until its discussion results in general diffusion of the important fact that hereditary crime and vice and certain forms of disabling diseases should be and can be eradicated by proper legislation. Science and law owe it to the world and posterity, to see that crime and moral depravity are not propagated through their neglect of plain remedies. It is better that certain neuropaths should go through life maimed by castration and spaying than that their defects should be bred into unborn generations to pervert their lives and breed the misery and crime of their wrongly organized progenitors. Better stop further peopling the world, if need be, than to fill it with beings as predestined to perversion as the hereditary epileptic is to fits.

THE DISEASES OF THE WILL. By Th. Ribot, Professor of Comparative and Experimental Psychology in the College de France. Translated by Merwin-Marie Snell. The Open Court Publishing Co., Chicago.

No living writer on matters pertaining to mind and will is more competent to write on this subject than the author before us. Students of mental physiology may read this book with profit and all who love to reflect upon the movements of mind under the direction or inhibitions of volition, will be entertained by it. It will prove profitable to physician, jurist or divine.

THE DYNAMICS OF LIFE. By W. R. Gowers, M. D., F. R. S. Publishers: P. Blakiston, Son & Co., 1012, Walnut Street Philadelphia.

This little brochure will entertain the thoughtful student of mind related to organism and all physicians. Under the above caption the author discusses in his well known forceful style, the dynamics of nerve, latent chemical energy, and in a concluding note, the subject of stimulation.

DR. G. ZANDER'S MEDICO-MECHANICAL GYMNASTICS: Its Method, Importance and Application. By Dr. Alfred Levertin, Former assistant to Dr. G. Zander, Lecturer on Balneology at the Medical School of Stockholm, Director of the Medico-Mechanical Zander Institute at Ostermalm in Stockholm, Head-Physician at the Bathing Establishment of Varberg. With a portrait of Dr. Zander, several explanatory illustrations and a map.

We have received the above with the Compliments of the Zander Institute of St. Louis and, having visited the institution, cordially commend it with confidence in its therapeutic value to our readers.

LES GRANDS ALIENISTES FRANCAIS par Le Dr. Rene Semelaigne, Tome Premier, Philippe Pinel, Esquirol, Ferrus, Jean-Pierre Falret Felix Voisin, Georget. G. Steinheil, Editeur, Paris.

This interesting volume is very filially dedicated to the memory of the author's worthy grandfather, and the book very properly begins with the biography of his most illustrious and more remote, but never to be forgotten ancestor, Doctor Philippe Pinel, whose kindly hand first struck the shackles from the manacled hands of the lunatic of Bicetre Hospital and taught the age in which he lived and the world after him a new and everlasting lesson

in philanthropy, to the enduring honor of mental Medicine.

The life histories of Esquirol, Falret, Voisen, Georget and other distinguished Alienists of France, follow.

No alienist can well afford to do without this thoroughly well written book. We thank the accomplished author for his kindly remembrance and shall cherish the book for its recorded hallowed memories of these great and good physicians of France.

THE ERECTILE TISSUES—THEIR PHYSIOLOGY, PATHOLOGY AND TREATMENT. By J. J. Caldwell, M. D., Baltimore, Md.

There is a time in the course of nature when women should cease to wish to be fecundated and men, to hope to be fertile.

DIFFERENTIAL DIAGNOSIS OF PARANOIA. Cramer (*Allgemeine Zeitschrift für Psychiatrie* Bd 51 H. 2.) has an elaborate article on the differential diagnosis of paranoia. He endeavors to prove that paranoia is a functional psychosis and puts "Verwirrtheit" or primary confusional insanity in the same group with it. Ever since Westphal included "acute primare verrücktheit" with *paranoia*, certain German and Italian alienists have been making confusion worse confounded by trying to put *hallucinatory confusion* in the same group with paranoia, and Cramer's article is another elaborate essay to prove this position.

With all due regard for the author's learning, we do not think that he has succeeded in overturning one of the firmest established doctrines of modern psychiatry. Ever since Snell's classical description of monomania, that of Sander on original paranoia, and Morel on *degenerative psychoses*, the great body of alienists, we think, have become more and more convinced that paranoia constitutes a distinct and separate group. The pre-eminently hereditary character of this affection, the systematized character of the delusions, the way in which the hallucinations reinforce the delusions and delusions, the hallucinations until a complex secondary personality is built up, are just so many distinctive marks of paranoia. The same may be said of the *somatic stigmata* which are found more especially in *original paranoia*. The way in which logical forms are retained and logical content is lost; and the retention intact of whole groups of mental faculties, are also characteristic signs of paranoia. Cramer seems to think, as do some other alienists, that because "acute hallucinatory confusion" occurs at times as an episode in paranoia, that therefore they belong together. We might as well include acute mania with parietic dementia, because we have sometimes maniacal episodes in the latter disease. There is no branch of psychiatry where so much confusion prevails as on the subject of "*primary confusional insanity*" and the way in which German authors use the terms "*verwirrtheit*," "*wahnsinn*" and "*verrücktheit*," is highly misleading. We can count up over twenty five different synonyms for "acute primare verwirrtheit" by different continental alienists, which alone is a sufficient index of the confusion reigning on this subject. Levinstein Schlegel in his great work, has coined a new term, *hallucinosi*, and puts it along with paranoia, under the *paranoesien*, by which we believe nothing has been gained. Cramer's efforts to show that paranoia is a functional psychosis, we think, have been in vain. In our opinion, one of the most firmly established doctrines of modern psychiatry, is that of the distinct position of paranoia.

In our mind a psychosis which so profoundly affects the psyche from birth on, cannot be a functional one. We believe that the doctrine, that paranoia is a degenerative, non-functional psychosis, constituting a separate and distinct symptom group, will not be shaken by the efforts of German alienists.

ARTHUR E. MINK.

NATIONAL CYCLOPEDIA OF AMERICAN BIOGRAPHY.—Volume V. of this magnificent work has made its appearance and is, if anything, superior to its predecessors. It excels all existing works in the number and quality of its portraits. There are about one thousand in this volume which are so life-like and speaking that the work when completed will be in truth a National Portrait Gallery.

Unlike all other cyclopædic works heretofore published, it has not tied itself to a rigid and unyielding method of alphabetical order, but has grouped its individuals in the order of their work in the various fields of activity. This is particularly valuable in the arrangement of presidential administrations. Each political change marked by a new administration is so arranged that the biographies of the men who exercised the functions of government are found on consecutive pages, and their combined lives gives the real basis for the historian to gather the material for a history of the administration. American Universities, like Harvard and Yale, are given prominence, and their histories outlined in the lives of their founders, presidents and prominent instructors, arranged in the order of their connection with the University. Institutions like the Roman Catholic and Protestant Episcopal churches, are illustrated in the biographies of their bishops, arranged in the order of their succession. Material movements, like the progress and development of the electric telegraph, are elucidated through the same method; also the developments of electricity as a motive power, of inventions affecting any single industry, and of social reforms like the abolition of slavery, the temperance movement and the reform of political excesses. To a person desirous of being thoroughly informed as to America, her men and her institutions, no single work offers such an amount of information in so condensed and comprehensive a form.

The grouping of Biographies around events, institutions, industries, etc., permits the publication of the work years before it could be possible under an alphabetical arrangement. In each successive volume is placed an index covering all preceding volumes, which makes its vast information instantly accessible, besides making the volumes already published available for immediate use without waiting for the completion of the set.

This work aims to present to the world, as has never before been attempted, life-like and vivid pictures of the men who, in the wilderness, founded and are building up a great nation, subject to no precedent and held in check by no conservatism; setting forth their aims, motives and aspirations, and recording their efforts and achievements which have so largely added to the advancement and civilization of the world.

The Publishers of this work, Messrs. James T. White & Co., of New York, have brought an unusual amount of intelligence to the preparation and execution of this great work and deserve the thanks and support of the entire country.

IN THE LITERARY DIGEST for week ending April 14 (ready April 12), among "Topics of the Day" will be: the troubles in South Carolina over the Dispensary Law; the Tariff Debate; the Behring Sea Question; Politics and the Saloon; the Liquor Traffic Without Private Profits; Mr. Gladstone's Retirement; Canadian Politics, etc. Under "Science": Submarine Photography; Artificial Sugar; Preservation of Milk, etc. Under "From Foreign Lands": Greater Britain, a Forecast of the Future—*Japan Weekly Mail*, Yokohama; *Bombay Gaurdian*; *The Subodh Patrika*, Bombay; *The Critic*, Halifax; *La Verite*, Paris. Loraine Under German Rule; Comments on Abbe Jacob's *Vingt ans apres*, by *The Leipziger Tageblatt* and *The Irish Catholic*, Dublin. The Transvaal and Mashonaland; General Jouberts' Manifesto; Comments by *The Colonies and India*, London; *The Home Journal*, London; *The Free State Express*, Bkoenfontain, Orange Free State; *The Standard*,

London. Socialism: Otto Prange in *das Rothe Gespenst; Die Greuzboten. Leipzig; The Figaro*, Paris; *The Week*, Toronto. A remarkable Paper: A French View of Greater New York—*L'Economiste Francais*, Paris, etc., etc. The number will be exceptionally full of information and papers of great interest. It will also be liberally illustrated. \$3.00 per year; 10 cents per copy at news stands, or of the publishers, Funk and Wagnalls Company, 18-20 Astor Place, New York.

KOLA.—Part I., "Pharmacognosy," Schlotterbeck; Part II., "Physiological and Therapeutic Actions," Stewart; Part III., "Clinical Study of Kola," Sheemaker; Part IV., "Bibliography." By F. E. Stewart, M. D., Ph. G. Director Scientific Department, F. Stearns & Co., Formerly Demonstrator and Lecturer on *Materia Medica and Pharmacy*, Jefferson Medical College, etc. Frederick Stearns & Co. has prepared and sent out to the profession this exceedingly able and interesting essay on the Kola Nut which every physician should read. The brochure is beautifully illustrated and well written, full of good ideas and facts to digest and therapeutic nuts to crack.

This is the first of a new series of scientific monographs published by their Scientific Department, on drugs now attracting the favorable notice of the medical profession. This monograph is not an advertisement, but a scientific treatise for the purpose of conveying scientific information to the professions of medicine and pharmacy.

"AN ECLIPSE OF VIRTUE," by 'Champion Bissell, is the title of a novel contained in the March number of "Tales From Town Topics." It is a startling exposition of the mysterious power of love. A beautiful young widow of great fortune first rejects the devotion of an ardent young lover, thinking it unwise to marry him, although she loves him devotedly, then kidnaps him, by inducing him to go away alone with her on a yacht. Their life together is ideal but fatal, as there appears a wild little native of San Domingo who robs the widow of her cavalier, bringing the story to a tragic climax, and the reader sees the possible despair that results from woman's depravity and man's deceit. The story is written in a brisk and daring style, and is accompanied by an unusually bright collection of narratives, poems and witticisms culled from the pages of TOWN TOPICS. Town Topics Publishing Co., 21 West 23d street, New York City.

THE JOHNS HOPKINS HOSPITAL REPORTS, Vol. 3, Nos., 7, 8, and 9, being the second Report in pathology of this great hospital, is on our table giving its usual valuable clinical and statistical record of work and results in the important department of practical medicine. The operating rooms of this department of this modern hospital are also illustrated and some manual and other procedures also are given, with the account of the operative technique not to be found in other illustrations of gynecology. After the two plates of the operating room, comes the text written by Howard Kelly, Mary Sherwood, Albert L. Sturdy, A. S. Marray, W. W. Russel, Hunter Robb, and the death record. The table of contents is entirely practical and technically of interest to the clinical worker in gynecological fields. We should say it was indispensable to the gynecological surgeon and worthy of a place in any medical library. We regret not having received preceding reports.

The Relation of Static Disturbances of the Abdominal Viscera to Displacements of the Pelvic Organs. Reprinted from the Proceedings of the International Periodical Congress of Gynecology and Obstetrics, Brussels, Belgium, 1894. By J. H. Kellog, M. D., Battle Creek, Mich.

A Study of the Comparative Actions of Antipyrine, Phenacetine and Phenocoll on the Circulation and Heat Phenomena. By David Cerna, M. D. Ph. D., Assistant in Physiology, Demonstrator of and Lecturer on Experimental Therapeutics in the University of Pennsylvania, and William S. Carter, M. D., Assistant in Physiology in the University of Pennsylvania.

Experimentelle Untersuchungen über den Einfluss der Ligatur der Gallenwege auf die biläre Infection. Nach einem Vortrag auf dem internationalen Congress zu Rom in der Section für allgemeine Pathologie und pathologische Anatomie am. 2. April 1894. Von Professor E. A. Homen, Helsingfors (Finland).

A Contribution to the Arrangement and Functions of the Cells of the Cervical Spinal Cord, To which is appended a Note on Central Changes secondary to Long-continued Disuse of an Extremity. By Joseph Collins, M. D., New York City.

The Modern and Humane Treatment of the Morphine Disease. By J. B. Mattison, M. D., Medical Director, Brooklyn Home for Habitués. Read before the Pan-American Medical Congress, Washington, D. C., 6th September, 1893.

Caries of the Spine followed by Compression of the Cord. By J. T. Eskridge, M. D., Denver, Col., Professor of Nervous and Mental Diseases and Medical Jurisprudence in the Medical Department of the University of Colorado.

Chairman's Address. Read in the Section on Obstetrics and Diseases of Women, at the Forty-fifth Annual Meeting of the American Medical Association, held at San Francisco, June 5-8, 1894. By Joseph Eastman, M. D., LL. D.

Practical Suggestions Respecting the Ventilation of Buildings. A Report to the State Board of Health. By John H. Kellogg, M. D., Member of the Michigan State Board of Health, Battle Creek.

Celiotomy for Bilateral Pyosalpinx, followed Four Days later by Appendicitis, Operation, Recovery. A case of Bilateral Ovarian Fibrosarcoma. By Frederick Holme Wiggin, M. D.

Liquor Sedans, Saw Palmetto, Damiana, Pichi, and Stylosanthes Elatior. Their Uses in Nervous Diseases—Their Medico-Legal Relation—Epilogue. By John J. Caldwell, of Baltimore, Md.

A Case of Insanity Due to the Menstrual Function—Oophorectomy—Recovery. By Eliot Gorton, M. D., Assistant Physician to the New Jersey State Hospital, Morris Plains, N. J.

Report of a Case of Cerebral Tumor, Diagnosed by Focal Symptoms with Operation, Successful Removal of Tumor and Exhibition of Specimen. By D. A. K. Steele, M. D., Chicago.

Responsibility of Epileptics. By A. E. Osborne, M. D., Ph. D., Superintendent California Home for the Care and Training of Feeble Minded Children, Glen Ellen, California.

Gardner's Syrup of Hydriodic Acid as an Internal Antiseptic. Especially valuable in Diseases of the Genito-Urinary Tract. As a Discutient in Cataract. Therapeutic Notes.

Facilities in Experimental Psychology in the Colleges of the United States. By William O. Krohn, Ph. D., Professor of Psychology and Pedagogy, University of Illinois.

The Pathology, Symptomatology and Treatment of Hemorrhoids, Simple and Complicated. By Thomas H. Manley, M. D., Visiting Surgeon to Harlem Hospital, New York.

Some Remarks on the Address Delivered to the American Medico-Psychological Association. By S. Weir Mitchell, M. D., May 16th, 1894. By Walter Channing, M. D.

Trephining in Three Cases of Epilepsy; Two of the Jacksonian Variety; One Due to old Meningeal Hemorrhage; Improvement. By J. T. Eskridge, M. D., of Denver, Col.

Syrup of Hydriotic Acid and Its Uses. By R. W. Wilcox, M. D., LL. D., New York. A Reply Thereto. By R. W. Gardner, New York, and Subsequent Correspondence.

Human Rumination Regarded in the Light of Atavic Tendency. Report of a New Case with Results of an Investigation of Its Digestive Chemism. By Edward C. Runge.

Critique of Macroscopic Examination of Specimens Removed in Thirty-Two Consecutive Laparatomies. By F. Byron Robinson, B. S., M. D., Chicago, Ill.

A Case of Chronic Peritonitis, with Intestinal and Abdominal Fistula—Enterorrhaphy—Recovery. By Frederick Holme Wiggin, M. D., New York City.

Syphilitic Nodose Periarteritis. By Alex. Bruce, M. A., M. D., F. R. C. P. Ed., F. R. S. E., Assistant-Physician, Edinburgh Royal Infirmary.

Three Cases of General Paralysis in Husband and Wife. With Syphilitic Infection in each Case, Certain or very Probable. By Dr. Richard Dewey, Chicago.

Transactions of the Medical Society of the State of North Carolina, Fortieth Annual Meeting held at Raleigh, N. C., May 9th, 10th and 11th, '93.

Ueber eine Farbemethode, mit der man Diabetes und Glycosurie aus dem Hute diagnosticiren kann. Von Dr. Ludwig Bremer, St. Louis, Mo.

Rest in Bed as a Resource in the Treatment of Chronic Non-Suppurative Catarrh of the Middle Ear. By A. Britton Deynard, M. D., New York.

Death from Nitrous-Oxid Gas. By Frank J. Thornbury, M. D., Demonstrator of Bacteriology, University of Buffalo, Buffalo, N. Y.

Intraligamentous and Retroperitoneal Tumors of the Uterus and its Adnexa. By William H. Wathen, A. M., M. D., Louisville, Ky.

Four Years' Work In Diseases of the Rectum at the Post-Graduate Hospital Clinic. By Charles B. Kelsey, M. D., New York City.

Syringo-myelia. Clinical lecture delivered at the medical department of the University of Colorado. By J. T. Eskridge, M. D.

Modern Homeopathy, Its Absurdities and Inconsistencies. By William W. Browning, A. B., LL. B., M. D., Brooklyn, N. Y.

Reflex Vomiting. By Gustavus Blech, A. B., M. D., Physician to the United Hebrew Relief Association of St. Louis, Mo.

Perityphlitis—Report of Three Cases of Perforating "Cæcitis" and "Pericæcitis." By F. C. Schaefer, M.D.

Intestinal Anastomosis. With the Report of a Case. By Frederick Holme Wiggin, M. D., New York City.

Tricuspid Insufficiency. By Frank J. Thornbury, M. D., Demonstrator of Bacteriology, University of Buffalo.

Lumbar Puncture for the Removal of Cerebro-Spinal Fluid. By William Browning, M. D., Brooklyn, N. Y.

Contusion of the Abdomen, with rupture of the Thoracic Duct. By Thos. H. Manley, M. D.

Surgical Treatment of Tumors of the Neck. By Thomas H. Manley, M. D., New York.

Twenty-Fifth Annual Report of the Superintendent of the St. Louis Insane Asylum.

A Case of Tetanus Neonatorum Recovery. By Edward C. Runge, M. D., St. Louis, Mo.

Charity Organization and Medicine. By George M. Gould, M. D., of Philadelphia.

Volume III, Transactions of Congress of American Physicians and Surgeons.

Tuberculosis in the Ano-Rectal Region. By Thomas H. Manley, M. D., New York.

Bidrag till Kannedom om Syringomyelin. af Prof. E. A. Homen, Helsingfors.

Tait's Perineal Flap Operation. By F. Byron Robinson, B. S., M. D.

Ett fall af gastroptos. Meddeladt af E. A. Homen och O. Schauman.

The Surgery of the Hand. By Robert Abbe, M. D., New York City.

Maternal Impressions. By Hubert Work, M. D., Pueblo, Colorado.

The Evolution and Descent of man. By T. B. Greenley, M. D.

Mountain Fever. By Hubert Work, M. D., Pueblo, Colorado.

Notes on the Life of Dr. Joseph Workman. By David Boyle.

Mysophobia. By S. V. Clevenger, M. D., Chicago, Ill.

THE ALIENIST AND NEUROLOGIST.

VOL. XVI.

ST. LOUIS, APRIL, 1895.

NO. 2.

ORIGINAL CONTRIBUTIONS.

Evidence of Sanity in Criminal Cases.*

By JAS. G. KIERNAN, M. D., Chicago.

Fellow of the Chicago Academy of Medicine; Professor of Forensic Psychiatry, Kent Law School; Professor of Nervous and Mental Diseases, Milwaukee Medical College.

BURDRAGHI,[†] who has analyzed homicide by the insane in Italy, finds that: The great majority of homicides by the insane are committed under the influence of persecutory delusions. Eighteen per cent. were associated with epilepsy and one was anthropophagous. In fifty-eight per cent. the killed persons were relatives and in forty-two per cent. strangers. The youngest homicide was only four years old, a girl who threw into the fire an infant she was left to mind; the oldest was seventy years of age, the majority (thirty), between thirty and forty years. Seventy-five were men and twenty-five women; seventeen were illiterate and sixty-one very imperfectly educated. Religious delusions were present in twelve, and in five of these were the immediate motive of crime; twenty-five labored under hallucinations and fourteen had been previously insane. Fifteen were instances of plural homicides, one

* Continued from Jan. (1895) ALIENIST AND NEUROLOGIST.

† Ann. di Psych., 1888.

individual having perpetrated no fewer than eleven. In nineteen no motive could be assigned. That even excessive joy may subvert the reason, is proved by the case of a man who, having unexpectedly inherited \$10,000,000, killed his wife and children. In fourteen per cent. the act was premeditated and in fifteen per cent considerable ingenuity shown in its execution. Twenty-seven sought concealment in flight, but all sooner or later returned. Three only attempted to prove an alibi. Twenty-three prevaricated but of these twelve had lost all recollection of their acts. Sixty-seven remembered them, but in fourteen cases they were committed under the influence of hallucinations. Fourteen others, though cognizant of what they had done, were of very weak intellect, and one was a case of transitory frenzy. Fifty-four exhibited more or less remorse, but of these forty-six failed to realize the heinousness of their crimes; seven gloried in them; twenty-three attempted to exculpate themselves; thirteen, undoubtedly of weak intellect, feigned insanity.

Epilepsy is frequently simulated for various reasons; perhaps the most striking instance of simulation was that of Clegg cited by Dr. Carlos Macdonald.*

CASE XXVI.—Clegg robbed his aunt and came to America. Here he commenced "dummy chucking" (feigning epilepsy to attract a crowd so that his confederate might pick their pockets). He joined a gang of pickpockets and operated in New York, Philadelphia and Boston. Large retail houses afforded a rich field, lady customers especially being victims during their consternation at sight of a well dressed young man writhing on the floor. The ferry boats, when crowded, offered excellent opportunities. On one of these occasions a kind hearted physician came to his assistance and meanwhile was relieved of his watch. Unaware of this, the physician, on landing, called a cab and took the scamp to his own office, where, after considerable effort he succeeded in restoring the patient, about the same time discovering the loss of his watch. Clegg expressed great sorrow and denounced the outrage, but the doctor consoled himself by the reflection that the loss of the watch was of little consequence compared with the life he had

* *Boston Med. and Surg. Journ.* Jan. 6th, 1881.

been instrumental in saving. Clegg's conscience smote him and he tried to get the watch for its owner, but it was "sold" before he got to the city. On another occasion he feigned a fit on a Fulton ferry boat and was taken in an ambulance to Bellevue Hospital. After pretending to sleep for an hour or two at the hospital, he recovered, but the authorities were suspicious and detained him for examination of the physicians of the "Hospital for Epileptics." In due time the physician from the epileptic hospital arrived, Clegg (who was on the alert), hearing the nurse say: "There comes the doctor," feigned a fit and was in convulsions when the latter reached his bedside. The doctor, after watching him a few moments, depressing his eyelids, trying his pulse and observing the numerous cicatrices on his face and forehead, expressed the opinion that it was a case of epilepsy. Clegg was discharged.

Subsequently he was sent to Blackwell's Island Penitentiary for stabbing a man. Here Dr. A. E. Macdonald pronounced him an epileptic. His next commitment placed Clegg in Sing Sing Prison. Here his "dummy-chucking" caused his transfer to the Asylum for Insane Criminals at Auburn. Dr. C. Macdonald on assuming charge found Clegg in seclusion and restraint. He was said to be subject to terrible fits. Dr. Macdonald ordered release from restraint and notification if a fit occurred. Shortly after he was called. He found Clegg on the floor, his face distorted and livid, saliva, frothy and bloody, oozing from the mouth; body apparently violently convulsed. Two patients were holding his limbs. He seemed to be having a series of rapidly recurring convulsions, each one commencing with marked muscular rigidity, the head being drawn to one side, the body twisted upon itself, thoracic muscles rigid, respiratory movement almost completely arrested. This tetanoid condition was followed by one closely resembling clonic convulsions. There was alternate contraction and relaxation of different portions of the body during which the head was frequently brought into such violent contact with the floor as to abrade the scalp; his tongue was wounded; respiration jerking and noisy and at each expiration, bloody saliva was forcibly ejected from his mouth. Pulse somewhat accelerated; eyes turned upward as far as possible; pupils moderately dilated. (It should be stated that the room was partially darkened by a window screen kept locked. This would account for the dilation of the pupils). His hands were tightly clenched, but Dr. C. Macdonald observed that the thumbs were not closed within the hand, also that the finger nails were not livid and when his hands

were forced open he immediately closed them again. There were no visible indications of relaxed sphincters. The "clonic convulsions" were followed by a considerable period of muscular quiet, immobility and a stupor lasting for a few moments during which he would occasionally open his eyes gaze around in a confused stupid manner when, suddenly another "spasm" would supervene. The series of seizures lasted about an hour, followed by a pretended sleep, after which Clegg appeared to be mentally confused for a day or two and complained of headache and physical weakness. Dr. Macdonald accused Clegg of feigning. This he first stoutly denied and pointed to the scars on his face and head as evidence. Finally he admitted that the fits were feigned but claimed that he was a real epileptic. Clegg finally made a full confession of his feigning and its objects.

However the fact should be remembered that, as Preston* has pointed out, epileptics may feign epilepsy for a purpose. As Magnan† and Brower‡ have shown, single symptoms of insanity or neuroses may be feigned by individuals insane or neuropathic.

The world-famous case of Hadfield (tried for shooting against George III and acquitted through Erskined's skillful defence) was at once an instance of communicated delusions and mixed motive. "Hadfield," to quote from Erskined's§ logical speech, "imagined that he had constant intercourse with the Almighty; that the world was coming to a conclusion and that like the blessed Saviour he was a sacrifice himself for its salvation. And so obstinately did his morbid imagination continue that he went to the theater to perform, as he imagined, the blessed sacrifice, and because he would not be guilty of suicide, though called upon by the imperious voice of Heaven, he wished that by the appearance of crime his life might be taken away from him by others. He went to see Truelock, (just before the shooting committed as a lunatic), who claimed that the Saviour's second advent and the dissolution of all human things were at hand, and conversed in this strain of madness. This

* ALIENIST AND NEUROLOGIST, 1887.

† 'Journ. of Nervous and Mental Diseases,' 1884.

‡ ALIENIST AND NEUROLOGIST, 1883.

§ Lawson "Criminal Defenses Insanity."

mixed itself with Hadfield's insane delusion. He immediately broke out upon the subject of his own propitiation and sacrifice for mankind, although only the day before, he had exclaimed that 'the Virgin was a whore; Christ was a bastard; that God was a thief,' and that he and Truelock were to be enthroned together."

Dr. H. G. Brainerd has reported a somewhat similar case* in Los Angeles, Cal.:

CASE XXVII.—Two middle-aged maiden sisters who lived by themselves in a little village had long been considered eccentric, and to hold peculiar religious views, but were not considered insane by the community in which they lived, till in obedience to a revelation to the younger sister they planned the sacrifice of a neighbor's child. A little boy of 6 years brought them milk daily, and as he came on his usual errand one evening the sisters seized him, forcibly removed his clothing, bathed and anointed him for a sacrifice, and were only prevented from carrying out their designs by the arrival of the boy's father on the scene. The sisters denied that they knew anything about the boy, but he, hearing his father's voice, made such an outcry that he was quickly rescued. They at first prevaricated in regard to their intentions regarding the child, but later becoming somewhat excited the younger sister boldly declared her revelation and her attempt to carry it out, and predicted dire results to the father for trying to thwart the will of God. They were of course both promptly sent to a hospital for the insane. The younger, who was the stronger physically and mentally, was disposed to deny the whole affair, and maintained excellent self-control and good behavior for a time, but finally became more disturbed by her hallucinations and delusions, threw off all restraint; announced that she was the Lamb's bride, and displayed numerous other delusions; openly declared the genuineness of her revelation to sacrifice the boy, and called for God's curses on the people who kept her from obeying the mandates of the revelation.

The elder sister never had any revelations but accepted her sister's statement as to her hallucinations most implicitly, and heartily joined with her to carry them into effect.

Both knew perfectly well that the taking of the child's life was murder in the eye of the law, and in the usual course of events would be punished as such, if discovered.

* ALIENIST AND NEUROLOGIST, 1894.

Personally, they were fond of the child, and would have grieved over his death ordinarily, but, as one of them expressed it, "When God's commands come in conflict with man's laws, which shall we follow?" They showed deliberation and cunning in attempting it. They were both laboring under delusions, and the deed would have been the direct and logical result of the controlling influence of those delusions. The younger sister had imperative conceptions or hallucinations of hearing, or both, from which arose her delusions. With her superior force of character she so dominated the mind of the elder sister that she accepted and cherished the younger sister's delusions, and was controlled as completely by them as though they had arisen within herself—a state of affairs which Dr. Brainerd has several times noted in paranoiacs who were intimately associated.

The semblance of fear seemingly apparent in securing police protection against mob violence by surrender to the police after homicidal attempts, is susceptible of explanation on the ground of delusion from which the element of fear is totally absent.* The paranoiac who violates law to carry out a delusional project will avoid immediate penalty of that violation, if it interfered with the project. The following illustrations of this fact occurred in France:

CASE[†] XXVIII.—Was that of an employe of the Panama Canal Company. While he was in the hospital on account of fever, his daughter died, which became the central feature of his delusions. He imagined that his daughter had been enticed away, dressed as a man and assassinated. From this time he had but one object in life to secure the punishment of her murderer, and reparation for his loss. All his endeavors having failed, he concluded that the chiefs of the Canal Company, De Lesseps especially, were trying to suppress the facts, and so one day, receiving no response to his demands, he posted himself where the Minister of Foreign Affairs would pass and fired a pistol at his carriage. He resisted the arrest by the populace but gave himself up to a gendarme to whom he denied positively any intention of killing the minister. Nothing would have been more easy as the carriage was not moving; he did not even aim at it, but fired into the ground. His only idea was to force the government to bring him before the court so that he could obtain justice.

*As in the Twombly case recently decided in Michigan; accused sent to Ionia.

†Cited by Talbot "Jour. Amer. Med. Assoc.," Nov. 17, 1894.

Legrand du Saulle* reports the following case:

CASE XXIX.—An hallucinated lunatic with delusions of persecution attempted to kill the health officer of the French shipping. The would-be homicide was a natural son, and his ancestral history was not obtainable. Details of his life were meager. He had changed from one trade to another. He was of a saturnine disposition naturally. To rid himself of this depression he drank freely. In 1878 he believed himself poisoned, and in consequence entered a hospital. At this time he accused a hotel keeper of persecuting him, later he believed himself the victim of a conspiracy on the part of this hotel keeper and followed the latter in the street with criminal intentions. He then had rumblings in his ears, and invisible persons worked on him with little machines, compelling him to alter his lodging to avoid them. Later on he heard voices saying aloud what he thought or did.

As he had a mirror in his room, he believed this to be reverberated sounds, and returned the mirror but the sounds did not cease. Once someone tried to shoot him with a revolver and others spied upon him, torturing him physically and morally. He was worked on by the telephone, the microphone, by electricity and in all sorts of ways. Once a voice told him to throw himself out of the window, but he refused to do this until he had unmasked his tormentors. In 1879 he was sent to an insane hospital and improved so much that it was deemed "safe" to discharge him. On discharge his old habits were resumed, and his old trouble reappeared. A voice told him to buy a knife and he did so. Feeling the need of protection, he placed himself under the ægis of a deputy, with whom he was slightly acquainted, who informed the police that the patient was a decided lunatic. December, 1880, Du Saulle sent him to a hospital, whence he escaped in April, 1882. For a long time he remained quite temperate and worked hard; September, 1883, he became intemperate, his delusions and hallucinations resumed their sway, and fearing poison he believed himself doomed to starvation. September 25, 1883, not having eaten anything for four days, he was feeble and broken down, felt that his head had been electrified and walked up and down without knowing where he was going. He heard a voice saying, "Kill yourself;" but he said, "Why should I kill myself? The guilty kill themselves. Why give my persecutors the satisfaction of

* *Gaz. des. Hop.*, Oct. 11, 1883.

my suicide?" Then the voice said: "If you don't wish to kill yourself, kill him." At the time the rain was pouring down, and he saw a man under an umbrella, at whom he fired twice. From a newspaper he soon after learned that he had shot a physician, to whom he wrote an anonymous letter, stating his persecutions. He went to an infirmary near a police station and asked for meals and a bed, of one of the assistants, who refused him without an order. He then went to a magistrate and accused himself of his crime. When examined he had olfactory hallucinations. Alcoholic intemperance only intensified his mental state.

*The California Supreme Court, over a decade ago, in full consonance with the spirit of the common law, decided that a confession made when insane is no evidence of guilt. So long therefore as doubt of the mental state of the accused exists, no confession made by him can be of strict legal value or of any value whatever.

The methods employed to obtain confession (the "sweat-box" and all modern methods of torture, illegal in countries where the English common law obtains), are all calculated to produce mental states of whose normal condition, doubt must, in accordance with strict law and abstract justice, exist. As Beccaria[†] remarks:

"Every act of the will is invariably in proportion to the force of the impression made on our senses, and the sensibility of every man is limited. The impression of pain, then, may increase in such a degree that occupying the mind entirely, it will compel the sufferer to use the shortest method of freeing himself from torment. His answer therefore will be an effect as necessary as that of fire in boiling water, and he will accuse himself of crimes of which he is innocent so that the very means employed to distinguish the innocent from the guilty will most effectually destroy all differences between them."

That mental torture has like effects with physical, was excellently illustrated by the Boorn case in Vermont.[‡]

CASE XXX.—A man was supposed to have disappeared; another man dreamed that he had been murdered

**People v. Wreden*, 59 Calif. 341 (1881).

[†] Essay.

[‡] Wharton and Stille "Medical Jurisprudence" Vol. III, p. 780.

at a certain place. Here some old decayed bones were found. Two brothers, relatives of the supposed victim, (with whom he was alleged to have been at variance on family matters) were on this evidence arrested. Clergyman and "sweat-box" methods were used to obtain confession. Under the resultant strain, one broke down and confessed that he and his brother were guilty. Soon afterwards he retracted his confession and proclaimed his innocence. A criminal in the jail with the brothers insisted that the confession had been reiterated to him after its retraction and thereby secured his own release. Upon the evidence of this convict and of the previous confession, the accused men were convicted and sentenced to be hanged. A short time before the time of execution of the sentence the supposed victim reappeared and "his bones" were proved to be those of some animal.

About eighty years ago, Haslam* pointed out that it is of frequent occurrence that persons laboring under insanity, although of exemplary lives and unblemished character, believe themselves guilty of the most atrocious crimes;—reputation, the dearest possession of the sound mind, is sacrificed without regret by the despairing lunatic, (he accuses himself of cowardice, of fraud, of secret murder or of a turpitude at which man revolts), as well as other blessings, with opulence and those comforts which render life desirable on becoming apprehensive of terminating their existence in the work house. Sometimes the desire of death is so ardent that they will perpetrate any crime in order to be arraigned and condemned at the bar. Of this "extraordinary perversion" he cites the following very striking instance:

CASE XXXI.—A woman about 36 years of age, who had been well educated, but whose conduct had not been exempt from some irregularities, in consequence of intemperance and manifold disappointments, became affected with madness. She was by turns furious and melancholic, and conceived she had murdered one of her children, for which she ought to suffer death. She detailed the manner in which she had destroyed the child and the motives which actuated her so circumstantially, and with so much plausibility and feeling that if he had not known her child to be living he might have been deceived. By her own hands she

* "Medical Jurisprudence as it Relates to Insanity," 1817.

had repeatedly endeavoured to terminate her existence, but was prevented by constant vigilance and due restraint. Her disposition to suicide was afterwards relinquished but she still persisted that for the murder of the child she ought to suffer death, and requested to be sent to Newgate, in order to be tried and undergo the sentence of the law;—indeed she appeared to derive consolation from the hope of becoming a public example and expiating her supposed crime on the scaffold. While in this state, and with a hope of convincing her of its safety, the child was brought to visit her. When she beheld it, there was a temporary burst of maternal affection, she kissed it, and, for a few moments, appeared to be delighted;—but a look of suspicion quickly succeeded and this was shortly followed by a frown of indignation, which rendered the removal of the child a wholesome necessity. Perhaps in no instance was the buoyancy of madness more conspicuous over reason, recollection and feeling. She insisted they had attempted to impose on her a strange child which bore a faint resemblance to her own; however, by such subterfuges she was not to be deceived; she had strangled the child until life had totally departed, and it was not in the order of nature that it should exist again. The effect of this interview was an exasperation of her disorder, she became more cunning and malignant, and her desire for an ignominious death augmented. To render this more certain and accelerate her prospective happiness, she enticed into her apartment a young female patient, to whom she appeared to be attached, and having previously plaited some threads to her bed-quilt into a cord, she fixed it around the neck of the young woman and proceeded to strangle her. Fortunately some person entered the room and unloosed the cord in time to save the victim. When this unhappy patient was questioned concerning the motive which induced her to attempt the destruction of a person for whom she had manifested kindness, she very calmly replied that as the murder of her own child was disbelieved, she wished to exhibit a convincing proof of the ferocity of her nature, that she might instantly be conveyed to Newgate, and hanged, which she desired as the greatest blessing. In a few months, notwithstanding her derangement had been of three years duration, this woman perfectly recovered.

Dr. W. A. Hammond,* an advocate of the Spartan method of dealing with the insane, insists very emphatically

*"Jour. of Psych. Med," Vol. V., 1871.

that confession has but little value per se as an evidence of guilt:

"Not very many years ago, thousands of individuals confessed to being witches and to having intercourse with the devil, and this with the full knowledge that such admission consigned them to torture and death. Many cases are on record in which persons have confessed to crimes for the purpose of saving the really guilty person from punishment. Many others have voluntarily come forward in time of great public excitement, in regard to some crimes and have apparently courted imprisonment and death by acknowledging themselves to be the criminals when very slight investigation has shown that they were liars. Physicians constantly meet with patients not obviously suffering from mental derangement, who confess to perpetrating offenses which, if really committed, would have sent them to the prison or the gallows.

A desire for notoriety will sometimes be the predominant force in causing a false confession, of this, Hammond cites the following case:

CASE XXXII.—Dr. Hammond was requested by Colonel Whitely, the chief detective officer of the government, to visit in the "Tombs," a man who had confessed himself to be a member of a gang of counterfeiters. This individual had written a letter to the Secretary of the Treasury, in which he detailed in the most consistent minute manner the organization of the band, and as members of which he gave the names of the most eminent and respectable citizens of the United States, of both political parties. His statement was believed, but Colonel Whitely, with the perspicuity for which he is noted, soon had his suspicions excited that the man's story was a fabrication. Nevertheless the evidence the fellow had sent to Washington was so far credited that it was under consideration whether or not the alleged members of the band, embracing governors of states, senators, representatives, high officers of the army and others, should be arrested. At this juncture Colonel Whitely requested Dr. Hammond to examine the man. He found him perfectly coherent but wavering and contradictory in his statements. Examination of the skull revealed a wound from a musket ball, and this, with the facts that he did not sleep, that he had cerebral congestion and was evidently laboring under delusions, convinced Dr. Hammond that he was fitter for an insane hospital than a prison, and he accordingly sent him there. In this case a desire for

notoriety and the self-inflation resulting from the association of others of exalted station had been the primary force of his action.

One phase of the question of confession is that in which an insane man confesses to be some one other than himself. This frequently leads to confusion of patients in insane hospitals. It has important forensic bearings.

In the Newby-Benton pension case recently decided against the claimant, are several interesting points in connection with that of identity. Newby was a soldier said to have been killed in battle. In 1891 an application for a pension was made by a man who claimed to be Newby and that the man buried under his name resembled him. That he had sustained a skull fracture which left him stunned; that he was made prisoner and taken to Andersonville where he was known as "Crazy Jack." The pension was opposed on the ground that the applicant was an ataxic pauper named "Rickety Dan" Benton, who led a wandering criminal life, but had never been in the army. The application was rejected and the applicant indicted for "false pretenses." During the resultant trial the defendant was identified by scores as "Rickety Dan," while scores of others swore he was Newby. Several witnesses identified him as "Crazy Jack" of Andersonville. He had scars present in Newby but absent before a certain time in "Rickety Dan."* He had the appearance of a man of 53 ("Rickety Dan's" age) not of a man of 67 (Newby's age). Newby's wife and mother identified him as Newby. The question arose whether the gait of the accused was due to skull injury, or hereditary ataxia. A sixteen year old son of Benton was afflicted with a disease similar to that of the man said to be his father. The case was further complicated by the fact that this son was born after the receipt of the injury alleged to have produced the gait in Newby. The claim of the defense was that the defendant at a certain period of life, was (in a poorhouse) confused with a person so deformed by locomotor ataxia as to be

*"Medical Standard" Vol, XIV, p. 53.

called "Rickety Dan." Considering the mental and motor symptoms alleged to have been produced by a skull injury and the notorious irregularities of poorhouse insane care, such confusion could easily occur. Furthermore, partial-dement stuporoid lunatics named erroneously, finally call themselves by the wrong name. The wandering life from poorhouse to poorhouse without insane hospital care, led by this man was not inconsistent with insanity (as was claimed by the prosecution). Indeed, deteriorated paranoiacs and persecutory lunatics often lead just such a life. The presence of Newby scars on the defendant notoriously absent from Benton, was a singular feature in the case evidently not given due weight by the jury. The most suspicious point of the defendant's case is his apparent recovery from insanity, which is most consistent with the simulation theory of the state although not entirely inconsistent with the partial dementia (stupor) theory of the defense.

Singular as were the facts of confusion of identity claimed to exist by the defense most of them actually occurred in the following case:

CASE XXXIII.*—September, 1866, an unknown man, insane and without power of speech, was found at Tallahassee, Fla., by the U. S. troops when they occupied that place. He had been there about fifteen months and nothing was known of his history but he was believed to be a Union soldier. Northern newspapers having described him, persons applied for permission to visit Tallahassee in hopes of finding a missing relative. In order to bring him to a more accessible place and increase chances of identification and recovery, he was transferred to the Washington, D. C., Insane Hospital. November, 1866, Superintendent Nichols published a description of the man. Several persons came to see him. August, 1867, Mrs. Houghton, from Ontario County, New York, spent some hours with the unknown, and believed him to be her husband. Dr. Nichols thought she was not mistaken but was not quite so confident of his identity as she was. He recommended that she and the unknown should be examined together by an army medical officer. The unknown therefore was examined by Surgeon General Barnes and Asst. Sur. General Crane. Dr. Barnes

* Wharton & Stille "Medicinal Jurisprudence" Vol., III, p., 665.

and Crane were satisfied that the unknown was Thomas B. Houghton, late private soldier in the 140 N. Y. Volunteers, and that Elizabeth E. Houghton had fully proved him to be her husband. Mrs. Houghton then made affidavit that her husband, Thomas B., was a private soldier in Company No. 140, N. Y. Volunteers, that she had been informed by the returned volunteers that he disappeared just previous to the battle of Fredericksburg. Having fallen ill on the march, he was sent to the nearest ambulance and was not heard of afterwards. From several marks seen on the unknown, she identified him as her husband. The muster-rolls in the Adjutant General's office corroborated Mrs. Houghton's statement. The age and description of Houghton, as given in the muster-roll, corresponded with the appearance of the unknown, and Mrs. Houston's account of her husband. Some proofs of identity were certainly most remarkable. The unknown had a singular mole on his back. Mrs. Houghton, having declared that such was the fact as to her husband, was asked to describe it and place her finger on it. She gave an accurate account of its size, shape and appearance and touched the spot where the "mother mark," as she called it, was located on her husband. Dr. Barnes insisted that the man's mole was much higher up, but she insisted that her husband's was just where her finger indicated. On uncovering the place she was found to be singularly accurate. No mention had been made in the published announcements of two scars she pointed out, one on the forehead under the hair and one on the foot. Three scars were found across the upper part of the shin (erroneously supposed to have been caused by a musket ball, though it was not easily seen how a ball could have passed through the flesh in such a direction without fracturing the bone). Mrs. Houghton said that some years before her husband left home, he was on a stool, slipped and the saw fell across his leg below the knee. She did not remember which limb it was but knew that scars were left by the wounds. Dr. Nichols had seen clusters of small scars on the breast and back of the unknown. Mrs. Houghton said her husband, while washing sheep in a river under a hot sun wore a red flannel shirt. When he came home his neck and chest were covered with an eruption. He was under a physician's care for two months before cure resulted, leaving scars as described. Mrs. Houghton's good faith was evident; when her attention was directed to scars on the unknown's arms, she insisted that there was only one vaccination on her husband. Dr. Nichols pointed out that the scars were evidently recent. It was

a common error among medical men, not especially skilled in cases of insanity, to bleed patients freely. This vicious practice tended to produce precisely a psychosis like that of the unknown. Mrs. Houghton brought a lock of her husband's hair and a daguerreotype taken just before he left home. Microscopical examination failed to detect any difference in texture or color between his hair and the unknown's except that the latter was slightly grizzled which might easily occur in lapse of time. Mrs. Houghton pointed out a lack of resemblance between the unknown and the daguerreotype explicable by lapse of time, suffering and change of dress. When the unknown was looking down, she could discover no trace of her husband's expression but when his attention was attracted and he looked up his attitude and expression were familiar. The color of the eyes (a singularly light blue) was common to the unknown and her husband. The daguerreotype showed remarkable tapering fingers. The thumbs were long and delicately pointed at the ends. This was the case in the unknown who had a habit of twirling one thumb over the other while sitting, as if in meditation. This was a custom of Houghton. From wearing short shoes Houghton's toes were bent under so that he was sometimes lame. The same deformity was in the unknown. No positive conclusion could be drawn from the effect of Mrs. Houghton's presence upon the unknown. He had some slight intelligence when told to stand up, he comprehended with difficulty but obeyed. He seemed excited by the presence of persons with whom he was unacquainted. Mrs. Houghton in conversing with him had endeavored to elicit recognition by telling him briefly of his family and friends. He sat by her side passively but several times looked up quickly and seemed about to speak. The morning after the first night which she passed in the ward, she sat by him, talked for some little time, and wishing him good-bye went toward the door. He promptly followed her, a thing quite unusual, stopping at the door. She turned, put out her hand, and said, "Come Thomas, won't you go with me." He turned back with his face toward the wall and trembled violently. She cited this with great but suppressed emotion as proof of recognition. In subsequent meetings less excitement was evident. January, 1869, circumstances occurred which seemed beyond possibility of a doubt to show that the last link of the chain of circumstantial evidence had been forged. The unknown replied in a distinct low tone "yes, sir" to a leading question about his health, by Dr. Eastman. He spoke later somewhat more freely than at first, but still

hesitatingly, timidly and only in brief reply to direct questions. His answers were intelligent and his intelligence appeared to be increasing. When later asked his name, he directly replied that it was "Thomas B. Houghton;" asked the name of his wife, he shook his head and said, "I don't know, sir;" asked where he was from, he replied "New York."

The unknown did not speak while in the Tallahassee hospital nor previously while under the care of Dr. Nichols. He was dumb for three and one half years. He was in a feeble, passive condition and did not speak when admitted at the general hospital. Disuse of his voice probably antedated that period many months. Time wore on; the patient progressed favorably. His wife went home, leaving him in the insane hospital. He steadily improved and began to converse. He was employed at light labor and grew robust. One day when addressed as Houghton he laughed and said it was not his name and gave another name. When asked if he had belonged to the 140 N. Y. regiment he said "No." A few days later he said with a peculiar chuckle that he had never been a Yankee soldier, but had been an overseer, or, as he called it, "a negro driver" of a Georgia plantation. Dr. Nichols at different times elicited that he was a native of Georgia, the town where he lived, and names of persons residing there and elsewhere in Georgia. He had gone into Florida on business and been drafted into a Florida company. He lost his mind soon after and did not remember what had since occurred. Dr. Nichols wrote to the persons he had named and from their replies became convinced that the story was true. Thus seemingly indubitable circumstantial evidence was completely overthrown. When restored, the man, at his own request, was sent south. His answering at first to the name of Houghton is readily accounted for by his having been called by that name, and hearing himself spoken of as from "New York," after mental improvement began.

Hysterical confessions are well-known sources of infinite mischief.* Legrand du Saulle† describes cases where women formed the delusion that they had been struck or stabbed by others, after having inflicted blows and wounds upon themselves. In one instance a young woman was found by her husband lying on the floor of her room in a fainting

* *Journal of Nerv. and Ment. Dis.*, 1884.

† "*Les Hysteriques*."

fit, her face covered with blood. On reviving from her swoon she stated that she had been attacked by armed men. The Paris newspapers related the case and, within three weeks, two similar events occurred in the French metropolis. All these cases proved to be fabricated by the supposed victims. A young girl wounded herself slightly with a pistol. She gave the police authorities the most minute details about an imaginary assassin who, according to her account, fired the shot, but she was found to be highly hysterical, and it was proved that she had wilfully wounded herself. In a third case (in Dr. du Saulle's experience) a young woman was found in a railroad carriage, stabbed in the left side. The incident caused great excitement, but it was proved, contrary to her assertions, that she had inflicted the wounds herself, and was a hysterical subject. A housemaid was found lying behind a door, bound, gagged and covered with bruises. She stated that she had been brutally attacked by two burglars with blackened faces, but she was a highly hysterical woman, and there appears to have been strong evidence that she had contrived to tie her own hands, and gag and bruise herself.

Tardieu cites the case of a woman of Courbevoie, who wished to pose as a victim of political conspiracy which she pretended to have discovered. One night she was found in a state of the greatest mental perturbation at the door of her apartment. She could not talk but stated in writing that she had been attacked outside her own house by a man, who attempted to garrote her, at the same time striking her twice with the dagger. Only the clothing was injured; the body of her dress and her corsets were found to be cut through but at different levels. She tried to make out that the attempt at strangulation had caused dumbness. Tardieu remarked in her hearing that this infirmity rapidly disappeared when produced under circumstances of this kind. She soon managed to regain her speech and in a short time admitted that the whole narrative had been evolved out of her inner consciousness. In a case reported by Legrand du Saulle, an hysterical female sent five persons to Cayenne (the French penal settlement) on a charge of rape. A

member of the French Medico-Psychological Association suspected from an after examination of the alleged victim that the whole story was of hysterical origin. Through his efforts the innocence of the prisoners at Cayenne was demonstrated and they were released from their unmerited confinement.

Toulmouche has reported the case of a young girl given to devotional exercises and much inclined to flagellation and asceticism. She one day cut herself with a pair of scissors 600 times on various parts of the body. She asserted these wounds were made by a man who tried to outrage her. She finally confessed that the injuries were all self-inflicted.

Huchard has had under observation an eighteen-year-old girl who accused the vicar of the parish of having raped her. She stated that one day while she was praying in the church the vicar shut all the doors and requested her to go with him into the sacristy. There (she claims) he made obscene proposals to her and, as she indignantly refused, he pointed a dagger at her; she fainted and during the faint he (she alleged) violated her. She was questioned during the trial. Her replies to the questions of the medical expert exciting suspicion, an examination ordered by the court revealed that she was still a virgin.

Tardieu has reported in the case of an inmate of a Gascony convent who claimed to have been made the victim of all sorts of outrages therein. Her father, with full faith in what she said, denounced the alleged criminals. Finding, however, that his daughter's story was untrue, he took his life. In another case cited by Tardieu a girl charged two young men with having violated her, and introduced into her rectum and vagina, stones, splinters and iron, which had to be extracted with great pain. She had convulsive seizures followed by paralysis. The two men were convicted and had been imprisoned for more than a year when the false nature of the accusation was discovered.

W. A. Hammond* reports the following case:

CASE XXXIV.—A twenty-two-year-old girl carried on a systematic course of deception for several months, and not

* "Treatise on Insanity."

only greatly injured an excellent young man but damaged her own character to such an extent that her family were compelled to remove from where they lived. The patient by wearing pads over her abdomen and gradually increasing their thickness led to inquiry from her mother's suspicion that an abdominal tumor existed. It was decided to consult an eminent gynecologist when the girl with tears, lamentations and self-reproaches confessed that she was pregnant. Of course the distress of the family was very great, and a great deal of anger was exhibited toward the supposed miscreant who had ruined a virtuous woman. For a long time she refused to reveal the name of her seducer but finally one morning she came down stairs with a letter she had written to her father in which a full (but false) revelation of all the circumstances was made. In this letter she declared that a gentleman they all knew and respected, was the seducer. Arrangements for her confinement were made in a distant city, and at the same time it was resolved by her parents to arrange if possible a marriage with the alleged destroyer of their daughter's honor. The father accordingly had an interview at which the gentleman was offered the alternative of immediate marriage or instant death. Denials and protestations were useless. He consented to the marriage but only on condition that he should be granted an interview with the lady in presence of her parents. This was agreed to. A meeting took place at once and the gentleman, who was a lawyer, succeeded by his tact and directness of his questions in exposing the fraud and obtaining a full confession.

Similar cases have occurred in the United States. The following adjudicated case occurred in New York:

CASE XXXV.*—In 1891, an Islip, L. I., milliner complained that her store had been fired several times, and that obscene letters had been sent to her. She confessed later that she set fire to the store and wrote the letters. She implicated a young man and stated she had been his mistress. He was arrested, but she failed to prove her charge against him and he was released. She was then indicted for perjury. In her confession read at the trial she said that she fired her store in order to get money to go to New York and find the young man with whom she was infatuated. Drs. William A. Hulse and Furman Nicoll testified that the defendant had suffered from hysteria and temporary insanity, resulting from dysmenorrhœa. Dr. L. C. Gray testified that under the right and wrong knowledge

* *Medical Standard*, Jan., 1892

test of the New York code she was not insane. The jury acquitted her in clear defiance of the code, on the ground of insanity.

Dr. Brigham* reported the following case nearly half a century ago:

CASE XXXVI.—A man was accused by an hysterical lunatic of an attempt to murder her. The delusional origin of the accusation was proven by Dr. Brigham, who also recognized the hysterical phase. The patient was hypnotized by a layman "mesmerizer," who did not believe the accusation. Her narration of the story during the hypnotic state varied decidedly from that given in the conscious state. The "mesmerizer," who regarded the woman as a lunatic, testified to these facts. The woman gagged herself, tied herself up, and did analogous hysterical tricks now familiar to neurologists. The accused was acquitted.

The confession of witchcraft to which Dr. Hammond refers, should not have gulled magistrates for a day, had these guided themselves by the principles of the old English common-law which made the witch a cheat,[†] did not admit of torture, and enforced the presumption of innocence, or by the testimony of scientists like Reginald Scott and Wier who exposed, as early as the 16th century, the morbid nature of the witch. An epidemic of hysterical convulsions, with nymphomania occurred at Cologne in 1554 in the Nazereth Convent. Dr. Jean Wier, sent to examine these patients, recognized that the nuns were possessed by the "demon" of lubricity and debauchery who ruled this convent to a frightful extent. Even Bodin, the famous witch jurisprudent of the 16th century, so biased with the trammels of ecclesiasticism and the "law and order" "protection of society" cant as to denounce Drs. Weir and Scott for insisting on the mental abnormalities of witches, was forced to recognize that:

"Sometimes the bestial appetites of women lead them to believe in a demon. This occurred in the year 1566 in Cologne where a dog was found which, it was claimed, was inhabited by a demon. This animal bit the religious ladies under their skirts. It was not a demon but a natural dog. A woman who confessed to sinning with a dog

* Amer. Jour. of Ins. April, 1848.

† Green's "History of the English People," Vol. II. p. 25.

was burned at Toulouse. But it may be that Satan is something sent by God, as certain it is that all punishment comes from him, through this means, to avenge such crimes as happened in a convent in Hess, where nuns sinned in a horrible manner with animals."

Bodin, it must be admitted, was supported in his witch notions by church-dodgers and society physicians like that detestable specimen, Sir Thomas Browne of "Religio-Medici" fame, who, a century after Scott and Weir, declared with equal lack of truth and logic, that those who deny the existence of witches are a "sort not of infidels but atheists." Browne, like the alcoholophobiac "father of the American Medical Association" with the degenerate law in the Prendergast case, pandered to the clamor of a political gang more than once. The most notorious witchcraft illustrations of the valuelessness of confession are as follows:

In 1809, hystero-demonomania was rife in the convent of Saint Ursula, at Alix. Two nuns said to be possessed, were exorcised without success. Led to the convent of Saint Baume, they denounced Louis Gaufridi, priest of the Church of Accules, of Marseilles, as a sorcerer. The patients had convulsions, hysteria accompanied with nymphomania, catalepsy and hallucinations. The judge charged these manifestations to the instigation of the priest, Louis Gaufridi, who was arrested, tried, condemned to die by the executioner and led to the gallows, rope around neck, in bare feet, and torch in hand. Thus punished, the innocent priest became insane and confessed that he was the cause of the nuns' demonomania. As soon as Gaufridi had been sentenced to death, the nuns of Saint Bridget's Convent at Lillie, who had assisted at the exorcise of the nuns of Saint Ursula were in turn attacked by hystero-demonomania. Reports soon spread that they, too, were possessed. Inquisitor Michaelis came to Avignon to exorcise the demons. One nun suspected of sorcery was sent to jail. Three others treated by exorcism, denounced the unfortunate girl who, up to this time, had asserted innocence but finished by declaring herself guilty, and stating that the demons found under the nuns' beds were placed there by the unfortunate Gaufridi. The devil, to recompense the priest, gave him the title of "Prince of Magicians," and promised herself sovereign honors for poisoning the minds of the other nuns by witchcraft. This was done with the host and consecrated blood, powdered buckgoat horns, human bones, child

skulls, hair, finger nails, flesh and semen from the sorcerer; by adding to this mixture human liver, spleen and brain, Lucifer gave to the hideous melange terrible strength. The sorcerers who gave this horrible concoction to their acquaintances not only destroyed them, but also a large number of new-born children. This unfortunate accused herself of having caused the death of many persons including children, the mother and often the godmother, of administering debilitating powders to others, of casting spells on the other nuns, which gave them over to lubricity. She had been to the witch vigils, had cohabited with devils, had committed sodomy, had intercourse with dogs, horses and serpents and had accorded her favors to the priest, Louis Gaufridi, although she was still a virgin. She was judicially found to be possessed by a demon, exorcised and condemned to perpetual imprisonment and severe penance. Immediately after her trial, another nun tried for sorcery, by force of torture and suggestion, pleaded guilty to having been at a witch vigil. Not only was she innocent but she was not even sick. She accepted the hallucinations of her companions.

Hystero-demonomania was also observed the same year near Dax, where more than 120 women were attacked by impulsive insanity as Calmiel calls it, but which has been designated by others as the "*Mal de Lairs.*" This variety of hysteria was characterized by convulsions and loud barking. De L'Ace who gives an interesting description of this outbreak did not fail to attribute the affection to sorcerers. He remarks:

"It is a monstrous thing to see in church more than forty persons all praying and barking like dogs on nights when the moon is full. This music is renewed on the entrance of every new sorcerer who has perhaps given the disease to some other woman. These possessed creatures commence barking from the time they enter church. The same barking symptoms were noticed in dwellings when these witches passed along the street, and all passers-by commenced to bark also when a sorcerer appeared. The convulsions resembled those noticed in enraged insane persons. During the attack the victims wallow on the earth, beating the ground with their bodies and limbs, turning their violence on their own persons without having full power to control their madness for evil doing."*

* "*Extraordinary Popular Delusions*" Vol. I p. 282.

According to Calmiel the cases were hysterical rather than epileptic. Mackay* deals with a phase of insane confession, which occurs during epidemics, in discussing the plague of Milan:

"The number of persons who confessed that they were employed by the devil to distribute poison as almost incredible. An epidemic frenzy was abroad which seemed to be as contagious as the plague. Imagination was as disordered as the body and day after day persons came voluntarily forward to accuse themselves. They generally had the marks of disease upon them and some died in the act of confession."

Dr. Robertson,† in discussing one alleged case of feigning, uses the following favorite but fallacious test:

"Further his memory is good with regard to many things, such as remembering the names of places in Peru and Brazil, and the names of several firms by whom, he says, he was employed during this year; yet at both my last interviews with him, which were nearly as long as my first, he declared he had never seen me before unless it was some months ago, though I tried him both with my hat off and on, and referred to incidents of the previous examinations. Such correctness of memory in relation to such a variety of subjects and extraordinary blanks as to others, are not met with in real insanity at his age."

It must be evident to the reflecting alienist that there are certain parietic dementia moods when events of the immediate past are forgotten while the facts of the more remote past are remembered and such being the case it is obvious that, as a test of insanity, generally speaking, such a condition of things is valueless, while it must be admitted that there are certain psychoses with which such symptoms do not co-exist.

From the cases cited it is evident that neither premeditation, skill in execution, motive, simulation, accomplices, concealment, presence of seeming fear, subsequent confession nor all together, are absolute tests of sanity offsetting evidences of insanity present in a given case. The principles of abstract justice, of common law and of science demand that sanity be proven in every criminal case beyond a reasonable

* *Medicine in the Middle Ages.*"

† *Jour. of Ment. Sci.* 1883-4.

doubt. No alleged duty to society nor alleged public exigency justifies any departure from scientific principles. As Macaulay has shown, judge and jury violations of law first used against the guilty, afterwards oppress the innocent. The witchcraft epidemic is a significant illustration of the dangers of the slightest departure from the common law presumption of innocence which extends to insanity as well as to all other factors involved in innocence. The enormous number of the insane in penitentiaries proves that the plea of insanity, in place of being abused, is too rarely used.

SEXUAL INVERSION IN WOMEN.

By HAVELOCK ELLIS, Lond., Eng.

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HOMOSEXUALITY has been observed in women from very early times, and in very wide-spread regions. Refraining from any attempt to trace its history, and coming down to Europe in the seventeenth century, we find a case of sexual inversion in a woman, which seems to be recorded in greater detail than any case in a man had yet been recorded.* Moreover Westphal's first notable case, which may be said to inaugurate the scientific study of sexual inversion, was in a woman. This passion of women for women has, also, formed a favorite subject with the novelist, who has usually been careful to avoid the same subject as presented in the male.† It seems probable that homo-sexuality is little

* This is the case of Catherina Margaretha Lincken, who married another woman, somewhat after the manner of the Hungarian Countess V., in our own day: she was condemned to death for sodomy, and executed in 1721, at the age of 27. (F. C. Muller, "Ein weiterer Fall von conträrer Sexualempfindung," *Friedrich's Blätter*, Heft iv, 1891.) This was in Germany. I have found a notice of a similar case in France, nearly two centuries earlier in Montaigne's *Journal du Voyage en Italie en 1580* (written by his secretary), it took place near Vitry le Français. Seven or eight girls belonging to Chaumont, we are told, resolved to dress and to work as men: one of these came to Vitry to work as a weaver, and was looked upon as a well-conditioned young man, whom everyone liked. At Vitry she became betrothed to a woman, but a quarrel arising no marriage took place. Afterwards "she fell in love with a woman whom she married, and with whom she lived for four or five months, to the wife's great contentment, it is said; but having been recognized by some one from Chaumont, and brought to justice, she was condemned to be hanged; she said she would even prefer this to living again as a girl, and was hanged for using illicit inventions to supply the defects of her sex." (*Journal*, ed. by D'Ancona, 1889, p. 11).

† Diderot's famous novel, *La Religieuse*, which when first published, was thought to have been actually written by a nun, deals with the torture to which a nun was put by the perverse lubricity of her abbess, for whom it is said Diderot found a model in the Abbess de Chelles, a daughter of the Regent, whose other daughter, the Queen of Spain, is said to have made the most violent love to her maids of honor. Balzac, who treated so many psychological aspects of love in a more or less veiled manner, has touched on this in *La Fille aux Yeux d'or*. Gautier (using some slight foundation in fact), made the adventures of a woman who was predisposed to homosexuality and slowly realizes the fact, the central motive of his wonderfully beautiful romance, *Mademoiselle de Maupin*; he approached the subject purely as an artist and poet, but his handling of it shows remarkable insight. Zola has described

if at all less common in woman than in man.*

Yet we know comparatively little of sexual inversion in woman; of the total number of recorded cases of this abnormality, now very considerable, but a small proportion are in women, and the chief monographs on the subject devote but little space to women.

I think there are several reasons for this. Notwithstanding the severity with which homosexuality in women has been visited in a few cases, for the most part men seem to have been indifferent towards it; when it has been made a crime or a cause for divorce in men, it has usually been considered as no offence at all in women.† Another reason is that it is less easy to detect in women; we are accustomed to a much greater familiarity and intimacy between women than between men, and we are less apt to suspect the existence of any abnormal passion. And allied with this cause we have also to bear in mind the extreme ignorance and the extreme reticence of women regarding any abnormal or even normal manifestation of their sexual life. A woman may feel a high degree of sexual attraction for another woman without realising that her affection is sexual, and when she does realize it she is nearly always very unwilling to reveal the nature of her intimate experience, even with the adoption of precautions, and although the fact may be present to her that by helping to reveal the nature of her abnormality she may be helping to lighten the burden of it on other women. Among the numerous

sexual inversion with characteristic frankness in *Nana* and elsewhere. Some fifteen years ago, a popular novelist, A. Belot, published a novel, called *Mademoiselle Giraud, ma Femme*, which was much read; the novelist took the attitude of a moralist who is bound to treat frankly but with all decorous propriety a subject of increasing social gravity; the story is that of a man whose bride will not allow his approach on account of her own *liaison* with a female friend continued after marriage. This book appears to have given origin to a large number of novels which I have not read but some of which are said to touch the question with considerably less affectation of propriety. Among other novelists of higher rank who have dealt with the matter may be mentioned Guy de Maupassant, Bourget, Daudet and Catulle Mendes. Among poets who have used the motive of homosexuality in women with more or less boldness, may be found Lamartine, (*Regina*), Swinburne (first series of *Poems and Ballads*) and Verlaine (*Parallelement*)

* As regards Germany Ill Moll *Die Conträre Sexual empfindung*, 2nd ed. p. 315.

† The popular opinion is, perhaps, represented by the remark of a young man of the last century (concerning the Lesbian friend of the woman he wishes to marry), quoted, in the *Souvenirs du Comte de Tilly*: "J'avoue que c'est un genre of rivalité qui ne me donne aucune bumeur; au, contraire cela m'amuse et j'ai l'immoralité d'en rire."

confessions voluntarily sent to Krafft-Ebing there is not one by a woman. There is, I think, one other reason why sexual inversion is less obvious in a woman. We have some reason to believe that while a slight degree of homosexuality is commoner in women than in men, and is favored by the conditions under which women live, well marked and fully developed cases of inversion are rarer in women than in men. This result would be in harmony with what we know as to the greater plasticity of the feminine organism to slight stimuli, and its less liability to serious variation.*

The same kind of aberrations that are found among men in lower races are also seen in woman though they are less frequently recorded. In New Zealand it is stated on the authority of Moerenhout (though I have not been able to find the reference) that the women practised Lesbianism. In South America where inversion is common among men we find similar phenomena in women. Among Brazilian tribes Gandavo wrote: "There are certain among these Indians who determine to be chaste and know no man. These leave every womanly occupation and imitate the men. They wear their hair in the same way as the men, they go to war with them or hunting, bearing their bows: they continue always in the company of the men, and each has a woman who serves her and with whom she lives."† This has some analogy with the phenomena seen among South American men. Dr. Holder, however, who has carefully studied the *bote*, tells me that he has met with no corresponding phenomena in women.

Among Arab women, according to Kocher, homosexual practices are rare, though very common among Arab men. In Egypt, according to Godard and others, it is almost fashionable, and every woman in the harem has a "friend." Among the negroes and mulattoes of French Creole countries, according to Corre, homosexuality is very common. "I know a lady of great beauty," he remarks, "a stranger in Guadalupe and the mother of a family, who is obliged to stay away from

* See H Ellis, *Man and Woman*, Chs. xliii and xvi.

†Gandavo, quoted by Lomacco, *Archives per l'Antropologia*, 1889, fasc 1.

the markets and certain shops because of the excessive admiration of mulatto women and negresses, and the impudent invitations which they dare to address to her."* He refers to several cases of more or less violent sexual attempts on young colored girls of 12 or 14, and observes that such attempts by men on children of their own sex are much rarer.

In prisons and lunatic asylums homosexual practices flourish among the women fully as much, it may probably be said, as among the men. There is, indeed, some reason for supposing that these phenomena are here even more decisively marked than among men.† Such manifestations are often very morbid, and doubtless often very vicious; I have no light to throw upon them and I do not propose to consider them.

With girls as with boys it is in the school, at the evolution of puberty, that homosexuality first shows itself. It may originate either peripherally or centrally. In the first case two children, perhaps when close to each other in bed, more or less unintentionally generate in each other a certain amount of sexual irritation, which they foster by mutual touching and kissing. This is a spurious kind of homosexuality; it is merely the often precocious play of the normal instinct, and has no necessary relation to true sexual inversion. In the girl who is congenitally predisposed to homosexuality it will continue and develop; in the majority it will be forgotten as quickly as possible, not without shame, in the presence of the normal object of sexual

* Corre, *Crime en Pays Creoles*, 1889.

† In a Spanish prison, not many years ago, when a new governor endeavored to reform the homosexual manners of the women, the latter made his post so uncomfortable that he was compelled to resign. Salillas in his *Vida Penal en España*, asserts that all the evidence shows the extraordinary expansion of Lesbian love in prisons. The *mujeres bonbrunas* receive masculine names—Pepe, Chulo, Bernardo, Valiente, etc., new comers are surrounded in the court-yard by a crowd of lascivious women who overwhelm them with honeyed compliments and gallantries and promises of protection, the most robust virago having most success; a single day and night complete the initiation. The frequency of sexual manifestations in insane women is well recognized. With reference to homosexual manifestations, I will merely quote the experience of Dr. Venturi in Italy: "In the asylums which I have directed I have found inverted tendencies even more common than have other observers; and that the vice is not peculiar to any disease or age, for nearly all insane women, except in acute forms of insanity, are subject to it. Tribadism must thus be regarded as without doubt a real equivalent and substitute for coitus, as these persons frankly regard it, in this unlike poederasty which does not satisfy in insane men the normal sexual desires." (Venturi, *La Degenerazione sicosessuale*, 1892, p. 148.

love. It is specially fostered by those employments which keep women in constant association, not only by day but often at night also, without the company of men. This is for instance the case with the female servants in large hotels, among whom homosexual practices have been found very common.* Laycock many years ago noted the prevalence of manifestations of this kind, which he regarded as hysterical, among seamstresses, lacemakers, etc., confined for long hours in close contact to one another in heated rooms. The circumstances under which numbers of young women are employed during the day in large shops and stores and sleep in the establishment, two in a room or even two in a bed, are favorable to the development of homosexual practices.

The cases in which the source is central rather than peripheral are equally common. In such a case a school girl or young woman forms an ardent attachment for another girl, probably somewhat older than herself, often a school-fellow, sometimes her school-mistress, upon whom she will lavish an astonishing amount of affection and devotion. This affection may or may not be returned; usually the return consists of a gracious acceptance of the affectionate services. The girl who expends this wealth of devotion is surcharged with emotion, but she is often unconscious of or ignorant of the sexual impulse and she seeks for no form of sexual satisfaction. Kissing and the privilege of sleeping with the friend are, however, sought, and at such times it often happens that even the comparatively unresponsive friend feels more or less definite sexual emotion (puddendal turbulence with secretion of mucus and involuntary twitching of the neighboring muscles), though little or no attention may be paid to this phenomenon, and in the common ignorance of girls concerning sex matters it may not be understood. In some cases there is an attempt, either instinctive or intuitional, to develop the sexual feeling by close embraces and

* I quote the following from a private letter written on the Continent: "An English resident has told me that his wife has lately had to send away her parlor-maid (a pretty girl) because she was always taking in strange women to sleep with her. I asked if she had been taken from hotel service and found, as I expected, that she had. But neither my friend nor his wife suspected the real cause of these nocturnal visits."

kissing. This rudimentary kind of homosexual relationship is, I believe, more common among girls than among boys, and for this there are several reasons: (1) A boy more often has some acquaintance with sexual phenomena and would frequently regard such a relationship as unmanly; (2) the girl has a stranger need of affection and self-devotion to another person than a boy has; (3) she has not, under our existing social conditions, which compel young women to hold the opposite sex at arm's length, the same opportunities of finding an outlet for her sexual emotions while (4) conventional propriety recognizes a considerable degree of physical intimacy between girls, thus at once encouraging and cloaking the manifestations of homosexuality.

These passionate friendships, of a more or less unconsciously sexual character, are certainly common. It frequently happens that a period during which a young woman falls in love at a distance with some young man of her acquaintance alternates with periods of intimate attachment to a friend of her own sex. No congenital inversion is usually involved. It generally happens in the end either that relationship with a man brings the normal impulse into permanent play, or the steadying of the emotions in the stress of practical life, leads to a knowledge of the real nature of such feelings and a consequent distaste for them. In some cases, on the other hand, such relationships, especially when formed after school life, are fairly permanent. An energetic emotional woman, not usually beautiful, will perhaps be devoted to another who may have found some rather specialized life-work but who may be very unpractical and who has probably a very feeble sexual instinct; she is grateful for her friend's devotion but does not actively reciprocate it. The actual specific sexual phenomena generated in such cases vary very greatly. The emotion may be latent or unconscious; it may be all on one side; it is often more or less recognized and shared. Such cases are on the borderland of true sexual inversion, but they cannot be included within its region. Sex in these relationships is scarcely the essential and fundamental element; it is more or less subordinate and parasitic. There

is often a semblance of a sex relationship from the marked divergence of the friends in physical and psychic qualities, and the nervous development of one or both the friends is often slightly abnormal. We have to regard such relationships as hypertrophied friendships, the hypertrophy being due to unemployed sexual instinct.*

For many of the remarks which I have to make regarding true inversion in women I am not able to bring forward the justificatory individual instances. I possess a considerable amount of information but owing to the tendencies already mentioned this information is for the most part more or less fragmentary and I am not always free to use it.

A class of women to be first mentioned, a class in which homosexuality, while fairly distinct, is only slightly marked, is formed by the women to whom the actively inverted woman is most attracted. These women differ in the first place from the normal or average woman in that they are not repelled or disgusted by lover-like advances from persons of their own sex. They are not usually attractive to the average man, though to this rule there are many exceptions. Their faces may be plain or ill-made but not seldom they possess good figures, a point which is apt to carry more weight with the inverted woman than beauty of face. Their sexual impulses are seldom well marked but they are of strongly affectionate nature. On the whole, they are women who are not very robust and well-developed, physically or nervously, and who are not well adapted for child-bearing but who still possess many excellent qual-

* In such cases there is often considerable or complete indifference to men. This may be due to general sexual coldness, but is occasionally acquired as the result of experience. I may refer to a case mentioned by Krafft-Ebing, (*Psychopathia Sexualis*, 1893, p. 195), which at the first glance might be taken for true congenital inversion. A Hungarian lady at the age of 18 had a very passionate relationship with a man and after separation from him she adopted men's clothing to obtain her living as a tutor and subsequently showed sexual affection for her own sex. She was highly neuropathic, and congenital inversion is suggested. Her own account, however, renders her actions coherent and reduces the organic factor to a minimum. She declared that she had no man-like feelings, her first and only deep love had been a woman's for a man. But she had become disillusioned concerning this man and when in earning her living in men's clothes she mixed with men (to avoid suspicion even accompanying her male companions to brothels) she acquired an unconquerable aversion to men in general. To satisfy her passionate nature and her longing to devote herself to another person (after practicing masturbation at first) she had begun to make sexual advances to women and girls, especially those of more than usual intelligence.

ities, and they are always womanly. One may perhaps say that they are the pick of the women whom the average man would pass by. No doubt this is often the reason why they are open to homosexual advances but I do not think it is the sole reason. So far as they may be said to constitute a class they seem to possess a genuine, though not precisely sexual, preference for women over men, and it is this coldness rather than lack of charm which often renders men rather indifferent to them.

The actively inverted woman differs from the woman of the class just mentioned in one fairly essential character: a more or less distinct trace of masculinity. She may not be, and frequently is not, what would be called a "man-nish" woman, for the latter may imitate men on grounds of taste and habit unconnected with sexual perversion while in the inverted woman the masculine traits are part of an organic instinct which she by no means always wishes to accentuate. The inverted woman's masculine element may in the least degree consist only in the fact that she makes advances to the woman to whom she is attracted and treats all men in a cool direct manner which may not exclude comradeship but which excludes every sexual relationship, whether of passion or merely of coquetry. As a rule the inverted woman feels absolute indifference towards men, and not seldom repulsion. And this feeling as a rule is instinctively reciprocated by men.

The following case is one where the inversion is scarcely developed but still present: Miss B., age 26; father German, mother English, a sister neurotic, a brother sexually inverted.

She has no repugnance to men, and would, she says, like to try marriage on a lease, but she has never experienced sexual feeling in the slightest degree.

She is attracted towards women of different kinds, casually towards very feminine women, but in a stronger degree to women who are themselves somewhat inverted. She recognizes, however, that there are "men's women" and "women's women." She likes to kiss and embrace the women she is attracted to, though she feels no spec-

ific sexual emotion towards them, and is indignant at the exaggerated importance which, she considers, is attached to the sexual instinct. Women are not usually attracted to her in the same degree.

She has never felt any attraction whatever to men, is completely indifferent; her behavior towards them has no sexual shyness. Men are not attracted to her.

There is nothing striking in her appearance, and except for a certain careless energy and downrightness her person and manners are not conspicuously man-like. She is fond of exercise, and smokes a good deal, has artistic tastes, is indifferent to dress.

In the next case the inversion is fully developed:

Miss X., unmarried, aged 30. Among her paternal relatives there is a tendency to eccentricity and to nervous disease. Her grandfather drank; her father was eccentric, cruel, miserly and hypochondriacal; he had hallucinations and obsessions and died of "softening of the brain." Her mother and mother's relatives, are entirely healthy, and normal in disposition.

At the age of 4 she liked to see the nates of a little girl who lived near. When she was about six the nurse-maid, sitting in the fields, used to play with her own parts, and told her to do likewise, saying it would make a baby come; she occasionally touched herself in consequence but without producing any effect of any kind. When she was about 8 she used to see various nurse-maids uncover their children's sexual parts and show them to each other. She used to think about this when alone, and also about whipping. Her first rudimentary sex feelings appeared at the age of 8 or 9 and were associated with dreams of whipping and being whipped, which were most vivid between the ages of 11 and 14 when they died away on the appearance of affection for girls. She menstruated at 12.

Her earliest affection, at the age of 13, was for a schoolfellow, a graceful coquettish girl with long golden hair and blue eyes. Her affection displayed itself in performing all sorts of small services for this girl, in constantly thinking about her and in feeling deliciously grateful

for the smallest return. At the age of 14 she had a similar passion for a cousin; she used to look forward with ecstasy to her visits and especially to the rare occasions when the cousin slept with her; her excitement was then so great that she could not sleep, but there was no conscious sexual excitement. At the age of 15 or 16 she fell in love with another cousin; her experiences with this girl were full of delicious sensations; if the cousin only touched her neck a thrill went through her body which she now regards as sexual. At 17 she had an overwhelming passionate fascination for a schoolfellow, a pretty, commonplace girl, whom she idealized and etherealized to so extravagant an extent that the sight of her once by chance coming out of a w. c. gave Miss X. a shock which she did not easily get over. This passion was so violent that her health *was to some extent impaired, but it was purely unselfish, and there was nothing sexual in it. On leaving school at the age of 19 she met a girl of about the same age as herself, very womanly, but not much attracted to men. This girl became very much attached to her and sought to gain her love; after some time Miss X. was attracted by this love, partly from the sense of power it gave her, and an intimate relation grew up. This relation became physical, Miss X. taking the initiative but her friend desiring such relations and taking extreme pleasure in them; they used to touch each other's parts and kiss each other tenderly (especially on the *mons veneris*) with equal ardour. They each experienced a strong pleasurable feeling in doing this, and there was ejaculation of mucus, but no orgasm. Their general behavior to each other was that of lovers but they endeavored as far as possible to hide this fact from the world. This relation lasted for several years and would have continued had not Miss X's. friend, from religious and moral scruples, put an end to the physical relationship. Miss X. had been very well and happy during this relationship; this interference with it seems to have exerted a demoralizing influence and also to have aroused her sexual desires. Soon afterwards another girl of a very fleshy and voluptuous type made violent love to Miss X. to which the

latter at last yielded recklessly, giving way to her sexual feelings as well as to her love of domination. She was ever afterwards much ashamed of this episode. Her remorse was so great that when her friend, repenting her scruples, implored her to let their relationship be on the same footing as of old, Miss X. in her turn resisted every effort to restore the physical relation. She kept to this resolution for some years and sought to divert her thoughts into intellectual channels. When she again formed an intimate relationship it was with a congenial friend and lasted for several years.

She has never masturbated. Occasionally, but very rarely, she has had dreams of riding accompanied by pleasurable sexual emotion; (she cannot recall any actual experience to suggest this, though fond of riding). She has never had any kind of sexual dreams about a male; of late years she has occasionally had erotic dreams about women.

Her feeling towards men is not in the slightest degree sexual, and she has never had the slightest attraction towards a man. She likes them as good comrades, as men like each other. She much enjoys the society of men but simply on account of their intellectual attraction. Her feeling towards marriage has always been one of absolute repugnance. She can, however, imagine a man whom she could love or marry.

She is attracted to womanly women—sincere, reserved, pure, but courageous in character. She is not attracted to intellectual women but at the same time cannot endure silly women. The physical qualities that attract her most are not so much beauty of face as graceful, but not too slender a body with beautiful curves. The women she is drawn to are usually somewhat younger than herself. She likes to take the active and protecting role with them. She is herself energetic in character, and with a somewhat neurotic temperament.

She finds sexual satisfaction in tenderly touching, caressing and kissing the loved one's body, especially the pudenda. (There is no *cunnilingus* which she regards with

abhorrence). She feels more tenderness than passion. There is a high degree of sexual erethism when kissing, with emission of mucus, but orgasm is rare and is produced by lying on the friend or by the friend lying on her, without any special contact. She likes being herself kissed but not so much as taking the active part.

She believes that homosexual love is morally right when it is really part of a person's nature and provided that the nature of homosexual love is always made plain to the object of such affection. She does not approve of it as a mere makeshift, or expression of sensuality, in normal women. She has sometimes resisted the sexual expression of her feelings, once for years at a time, but always in vain. The effect on her of loving women is distinctly good, she asserts, both spiritually and physically, while repression leads to morbidity and hysteria. She has suffered much from neurasthenia at various periods but under appropriate treatment it has slowly diminished. The inverted instinct is too deeply rooted to eradicate but it is now well under control.

The chief characteristic of the sexually inverted woman is a certain degree of masculinity. As I have already pointed out, a woman who is inclined to adopt the ways and garments of men is by no means necessarily inverted. In the volume of *Women Adventurers*, edited by Mrs. Norman for the Adventure Series, there is no trace of inversion; in most of these cases, indeed, love for a man was precisely the motive for adopting male garments and manners. Again, Colley Cibber's daughter, Charlotte Charke, a boyish and vivacious woman who spent much of her life in men's clothes and ultimately wrote a lively volume of memoirs, appears never to have been attracted to women though women were often attracted to her, believing her to be a man; it is, indeed, noteworthy that women, seem with special frequency to fall in love with disguised persons of their own sex. There is, however, a very pronounced tendency among sexually inverted women to adopt male attire when practicable. In such cases male garments are not usually regarded as desirable chiefly on account of

practical convenience, nor even in order to make an impression on other women, but because the wearer feels more at home in them; thus Moll mentions the case of a young governess of 16 who while still unconscious of her sexual perversion used to find pleasure when every one was out of the house in putting on the clothes of a youth belonging to the family. And when they still retain female garments these usually show some traits of masculine simplicity, and there is nearly always a disdain for the petty feminine artifices of the toilet. Even when this is not obvious there are all sorts of instinctive gestures and habits which may suggest to female acquaintances the remark that such a person "ought to have been a man". The brusque energetic movements, the attitude of the arms, the direct speech, the inflexions of the voice, the masculine straightforwardness and sense of honor, and especially the attitude towards men, free from any suggestion either of shyness or audacity, will often suggest the underlying psychic abnormality to a keen observer.* Although there is sometimes a certain general coarseness of physical texture, we do not find any trace of a beard or moustache.†

It is probable, however, that there are more genuine approximations to the masculine type. The muscles are

* I may quote a description by Prof. Zuccarelli of Naples of an unmarried middleclass woman of 35, the subject of inversion, as being characteristic of this bearing in its most developed form: "While retaining feminine garments her bearing is as nearly as possible a man's. She wears her thin hair thrown carelessly back *alla Umberto*, and fastened in a single knot at the back of her head. The breasts are little developed and compressed beneath a high corset; her gown is narrow without the expansion demanded by fashion. Her straw hat with broad plaits is perhaps adorned by a feather or she wears a small hat like a boy's. She does not carry an umbrella or sunshade; walks out alone, refusing the company of men; or if accompanied by a woman, as she prefers, offering her arm and carrying the other hand at her waist, with the air of a gentleman. In a carriage her bearing is peculiar and unlike that habitual with women. Seated in the middle of the double seat, her knees being crossed or else the legs well separated, with a virile air and careless easy movement she turns her head in every direction, finding an acquaintance here and there with her eye, saluting men and women with a large gesture of the hand as a business man would. In conversation her pose is similar; she gesticulates much, is vivacious in speech with much power of mimicry, and while talking she arches the inner angles of her eyebrow, making vertical wrinkles at the centre of her forehead. Her laugh is open and explosive and uncovers her white rows of teeth. With men she is on terms of careless equality. (*"Inversione congenita dell' istinto sessuale in una donna," L' Anomalo*, Feb. 1889).

† It is a mistake to suppose that bearded women approach the masculine type. See Max Bartels elaborate study, "Ueber abnormal Behaarung beim Menschen," *Zeitschrift für Ethnologie*, Bd. XIII, 1881, p. 219. And for the same condition in insanity, L. Harris-Liston "Cases of Bearded Women," *British Med. Journal*, June 2nd, 1894.

everywhere firm with a comparative absence of soft connective tissue, so that an inverted woman may give an unfeminine impression to the sense of touch. Not only is the tone of the voice often different but there is reason to suppose that this rests on a basis of anatomical modification; at Moll's suggestion Flatau examined the larynx in 23 inverted women and found in several a very decidedly masculine type of larynx, especially in cases of distinctly congenital origin. In the habits not only is there frequently a pronounced taste for smoking (sometimes found in quite feminine women) but there is also a dislike and sometimes incapacity for needlework and other domestic occupations, while there is often some capacity for athletics. No masculine character is usually to be found in the sexual organs which are sometimes undeveloped. Notwithstanding these characters, however, sexual inversion in a woman is as a rule not more obvious than in a man. At the same time the inverted woman is not usually attractive to men. She herself usually feels the greatest indifference to men and often cannot understand why a woman should love a man, though she easily understands why a man should love a woman. She shows, therefore, nothing of that sexual shyness and engaging air of weakness and dependence which are an invitation to men. The man who is passionately attracted to an inverted woman is usually of rather a feminine type. For instance, in one case present to my mind, he was of somewhat neurotic heredity, of slight physique and not sexually attractive to women, with a thin voice, precise and careful habits, considerate for others to a feminine degree, prim in his views of life, very domesticated in his manner of living—in short, the man who might easily have been passionately attracted to his own sex.

While the inverted woman is cold, or at most comradely, in her bearing towards men, she may become shy and confused in the presence of attractive persons of her own sex, even unable to undress in their presence, and full of tender ardor for the woman whom she loves.

The passion finds expression in sleeping together, kissing and close embraces, with more or less sexual excite-

ment, the orgasm sometimes occurring when one lies on the other's body; the extreme gratification is *cunnilingus*, *in lambendo lingua genitalia alterius*, sometimes called sapphism. There is no connection, as was once supposed, between sexual inversion in women and an enlarged clitoris which has very seldom been found in such cases, and never, so far as I am aware, to an extent that would permit of its use in coitus with another woman.

The inverted woman is an enthusiastic admirer of feminine beauty, especially of the statuesque beauty of the body, unlike in this the normal woman whose sexual emotion is but faintly tinged by æsthetic feeling. In her sexual habits we rarely find the degree of promiscuity which is not uncommon among inverted men. I am inclined to agree with Moll that homosexual women love more faithfully and lastingly than homosexual men. Sexually inverted women are not rarely married; Moll, from various confidences which he has received, believes that inverted women have not the same horror of normal coitus as inverted men; this is probably due to the fact that the woman under such circumstances can retain a certain passivity. In other cases there is some degree of psycho-sexual hermaphroditism, although as among inverted men the homosexual instinct seems usually to give the greater relief and gratification.

It has been stated by many observers who are able to speak with some authority—in America, in France, in Germany, in England—that homosexuality is increasing among women. It seems probable that this is true. There are many influences in our civilization to-day which encourage such manifestations. The modern movement of emancipation—the movement to obtain the same rights and duties, the same freedom and responsibility, the same education and the same work—must be regarded as on the whole a wholesome and inevitable movement. But it carries with it certain disadvantages. It has involved an increase in feminine criminality and in feminine insanity, which are being elevated towards the masculine standard. In connection with these we can scarcely be sur-

prised to find an increase in homosexuality which has always been regarded as belonging to an allied, if not the same, group of phenomena. Women are, very justly, coming to look upon knowledge and experience generally as their right as much as their brothers' right. But when this doctrine is applied to the sexual sphere it finds certain fixed limitations. Intimacies of any kind between young men and young women are as much discouraged socially now as ever they were; as regards higher education the mere association of the sexes in the lecture-room or the laboratory or the hospital is discouraged in England and in America. The sexual field of women is usually restricted to trivial flirtation with the opposite sex and to intimacy with their own sex; having been taught independence of men and disdain for the old theory which placed women in the moated grange of the home to sigh for a man who never comes, a tendency develops for women to carry this independence still further and to find love where they find work. I do not say that these unquestionable influences of modern movements can directly cause sexual inversion, though they may indirectly, in so far as they promote hereditary neurosis; but they develop the germs of it, and they probably cause a spurious imitation. This spurious imitation is due to the fact that the congenital anomaly occurs with special frequency in women of high intelligence who, voluntarily or involuntarily, influence others.

The frequency of homosexual practices among prostitutes is a fact of some interest and calls for special explanation, for at the first glance it seems in opposition to all that we know concerning the exciting causes of homosexuality. Regarding the fact there can be no question. It has been noted by all who are acquainted with the lives of prostitutes, though opinion may differ as to its frequency; at Berlin, Moll was told in well informed quarters, the proportion of prostitutes with Lesbian tendencies is about 25 per cent. This is precisely the proportion at Paris many years ago, according to Parent-Duchatelet, who investigated the matter minutely; to-day, according to Chevalier, it is

larger; and Bourneville believes that 75 per cent. of the inmates of the Parisian venereal hospitals practise homosexuality. In London, so far as my inquiries extend, homosexuality among prostitutes is very much less prevalent, and in a well-marked form is confined to a comparatively small section. The tendency does not seem to appear at a very early stage in the prostitute's life, and very frequently the prostitute's friend is not herself a prostitute. It is evident that there must be some radical causes for the frequency of homosexuality among prostitutes. One such cause doubtless lies in the character of the prostitute's relations with men; these relations are of a professional character and as the business element becomes emphasised the possibility of sexual satisfaction diminishes; at the best, also, there lacks the sense of social equality, the feeling of possession, and scope for the exercise of feminine affection and devotion. These the prostitute must usually be forced to find either in a "bully" or in another woman. Apart from this, it must be borne in mind that in a very large number of cases the prostitute shows in slight or more marked degree, many of the signs of neurotic heredity, of physical and mental "degeneration," so that it is almost possible to look upon prostitutes as a special human variety analogous to instinctive criminals.* The irregular life of the prostitute, the undue amount of sexual irritation, and indulgence in alcohol, still further emphasise this unbalancing influence; and so we have an undue tendency to homosexuality, just as we have it among criminals, and, to a much less extent, among persons of genius and intellect.

I do not propose to investigate here the pathological associations of sexual inversion in women. In this respect congenital feminine inversion is entirely on a level with masculine inversion. That is to say, it is an anomaly which even when the subject herself is fairly healthy, may be connected with neurotic heredity, and which is often associated with neurasthenia, hysteria and occasionally

* This point of view has been specially emphasised by Lombroso and his followers; see Lombroso and Ferrero, *La Donna Delinquente*.

epilepsy and other more pronounced forms of nervous disintegration.

In the treatment of sexual inversion it is to these associated nervous disorders that our attention may best be devoted. In the absence of such symptoms the sexual invert will not as a rule appear before the physician. And this may be as well, for in such cases by mistaken assurances of permanent cure, and by encouraging marriage, it is easily possible to bring about very disastrous results, to the patient, to her husband and to the probably neurotic offspring. The physician would do well in such cases to cherish a certain judicious scepticism concerning his own powers. It is sometimes not difficult by "suggestion" or actual hypnotism (as practiced by Schrenck-Notzing) to persuade the patient that she is cured. In this way she may be plunged into a position that is false and more miserable, more degrading to herself and dangerous to others, than her original position. It is too often forgotten that, as Raffalovitch has pointed out, to the congenitally inverted person the normal instinct is just as unnatural and vicious as homosexuality is to the normal man or woman; so that in a truly congenital case "cure" may simply mean perversion, involving the general demoralization that usually accompanies perversion. The best ideal to hold out in such cases—even although the ideal may not be perfectly reached—is not the ideal of normal love but the ideal of sexual abstinence in so far as indulgence may be doing injury to others. Very great and permanent benefit may be imparted by treating the associated neurotic conditions and general impairment of health. By a wholesome and prolonged course of physical and mental hygiene the patient may be enabled to overcome the morbid fears and suspicions which have sometimes been fostered by excessive sympathy and coddling, and the mind may thus indirectly be brought into a tonic condition of self-control. The inversion will not thus be removed but it may be rendered comparatively harmless, both to the patient herself and to those who surround her. If the physician is not satisfied with this result he will need all the tact and judgement and caution he possesses to avoid disaster.

The Forensic Aspect of Impotence in Illinois.*

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THE essential conception of marriage in the common law is that of a contract for the creation of a family, a contract which like all other contracts implies good faith and power to fulfill on the part of both contracting parties. In Scotland where the common law form practically obtains, this view is held.† By the common law in the United States is meant common law freed from the trammels of ecclesiastical and English statute law which existed here at the time of the Revolution and which constitutes the contradictory mess now quoted too often even judicially as common law. Differing as the ecclesiastical, Roman, and English Common law do, as to the rights of the individual, their views as to the object of marriage are identical so far as they relate to the influence of impotence as a factor in divorce or marriage nullification.

The law of England, as laid down by Blackstone, is, that—A total divorce (that is, a divorce *a vinculo matrimonii* as distinguished from a partial divorce *a mensa et thoro*) is given whenever it is proved that corporeal imbecility existed before the marriage. In this case the connection is declared to have been null and void *ab initio*. Imbecility may, however, arise after marriage, but it will not vacate it because there was no fraud in the original contract,

*Read before the Chicago Academy of Medicine, February 8th, 1895.

†Ogston "Medical Jurisprudence,"

and one of the ends of marriage, the procreation of children, may have been answered. Chitty says, "In nullity by reason of the alleged impotence of the husband, a certificate twelve years after the marriage, that the wife was still *virgo intacta*, although *apta viris* coupled with two several confessions of the husband of his incapacity, and with proof that the woman's health had suffered, though the husband had not given in his answer, removed to France, and refused to undergo surgical examination, was holden sufficient in the ecclesiastical court."

It should be remembered that while divorce could be decided in Scotland by the courts, it, in England, until quite recently, was a question for the House of Lords alone to decide, although a divorce court now exists; hence, Blackstone deals with the law as unmodified by this element. In marriage nullity matters the ecclesiastical court had jurisdiction. In this connection it is of interest to note that the German code* extends the right to marriage nullification on the grounds of bodily infirmities which inspire disgust and repugnance or which hinder accomplishment of sexual relations. Of the scientific validity of this phase of the German law, there can be no doubt. It was a survival in the German law of the Teutonic principle of the common law divorce *causa impotentia seu frigidity*. This was the fittest to survive as not conflicting with the objects of marriage. As the ecclesiastical law of the Roman Church, which once governed all Western Europe, forbids coitus except for procreation, its marital law, to be consistent, must nullify marriage when this could not occur and make procreation the test of impotence. Some strange possibilities of such a doctrine, arise under the artificial fecundation procedure. Averroes† held, and his view was sustained by Mohammedan jurists, that a woman bathing near a man who had just ejaculated would so attract the semen as to become fecundated.

That abiding place of weird, occult pathology, the United States Pension Office‡ had among its cases, many

*Allgemeine Landrecht Sect. 697.

†Fonblanque "Medical Jurisprudence."

‡Witthaus "Medical Jurisprudence."

of which have been pushed to successful issue on less plausible testimony, a claim for a widow's pension in which the claimant declares that at one of the battles of the late war, she was a spectator, and, happening, to stand behind some soldier, was wounded in the abdomen by a ball that had previously wounded one of the soldiers in the testicles, from which she became pregnant and was delivered of a boy. What purports to be corroborative testimony bearing on the case, is the allegation that the boy subsequently underwent an operation for lithotomy, when a conoidal masket-ball was removed from the bladder. Roman casuists might well ask whether, when the wife could be fecundated in these ways, should the husband be considered impotent if capable of erection? The ecclesiastical law produced in France (and other countries) the "judicial congress" which existed from the 13th to the 17th century. The judicial congress was a very simple affair. In those days sexual excess was common while religious rule was considered binding, so that many with keen consciences and strong passions were denied gratification.* If, therefore, one party in a marriage asked an indulgence or a separation because of impotency or inefficiency of the other party, the matter was referred to a select committee who were authorized to make ocular and digital examinations of the generative organs of one or both parties. They could, if they choose (and they often did), order husband and wife to copulate in their presence (which copulation was called "judicial congress") so that sexual power or impotency of either or both might be tested. The arbitrators had full power to order "experts" or assistants to engage either of the disputants in sexual combat in their presence, as a further test of fitness for marital life. Most complainants (as in most impotence cases) were women. The committee (as French judicial officers, necessarily males) had the privilege of testing, if they deemed it necessary, the woman's inordinate desire or frigidity by a personal encounter. The various modes of "judicial congress" thus resulting can better be imagined than described. "Judicial congress" was abolished in consequence of its

*Campbell "Phallic Worship."

failure in the case of the Marquis de Langley who, failing to prove his power in such a congress, had seven children by a second wife after his divorce from the complainant. His case recalls that of the divorce obtained by the Countess of Essex* in which James I, of England, was accused, it would appear from the evidence, unjustly, of stretching his royal prerogative for his favorite. He was much given to this, but on clear, scientifically justifiable evidence, seems to have been here guiltless. The Earl of Essex was sued by his Countess for divorce on the ground that he was impotent. She claimed to be *virgo intacta*, but is said to have substituted her maid for herself when examined. The Earl admitted the charge as regards the countess, although he denied it as to others. The case is complicated by her guilty passion for the Earl of Rochester but, historians to the contrary, notwithstanding, should be considered scientifically settled by the Earl's admission. The ecclesiastical law test (illustrated in the case of the Marquis de Langley) raises from its failure the question of what, scientifically, is the character of the impotence necessary to nullify marriage, or to allow divorce. The common law allowed divorce *causa impotentia seu frigiditas*. Definition of the impotence, the common law wisely left to be ascertained in the individual case, subject to the usual rules of evidence and the nature of the contract. The statutes of most states have attempted to define impotence with the usual result of statute definition, confusion. In Illinois,† the impotence must be *natural*, but, as to the significance of the term natural, judges differ, as was excellently illustrated in the case, which forms the basis of the present paper.

The court may require defendant‡ to submit to galsur examination, unless this has been done before examination. Long unexplained delay in seeking remedy, bars action. Ignorance of defect, will not excuse delay, if its presence can be ascertained by due diligence.

It is not necessary to prove impotence to all women, only to the plaintiff. Failure to consummate marriage three

*Hargraves "State Trials" I, p. 315.

†Devenbaugh vs. Devenbaugh. Lebaron vs. Lebaron.

‡Newell vs. Newell.

years after, and impotence from oöphorectomy known to the woman, constitute, unexplained, a cause for nullity. Refusal of sexual intercourse within reasonable time constitutes a presumption of incapacity. After presumptive evidence of impotence, the parties must be physically capable of fulfilling the conditions of copulation, not necessarily procreation.*

Feebly plausible evidence of Impotence is often offered. The "Provincial Medical Journal"† cites a case in which a patient wished to establish a charge of impotence against her husband. She had already been examined with this object, and pronounced *virgo intacta*. On only few occasions could sexual intercourse have occurred within a given number of months. She strongly resisted internal examination, lest hymenal proof of her virginity be destroyed. The hymen was found injured and of normal appearance. Casually during examination a slight suprapubic enlargement was discovered. This aroused suspicion which the appearance of the mammæ confirmed. A vaginal examination carefully made found a perfectly yielding hymen. Though told she was pregnant, the patient persisted in denial of cohabitation even to the point of endeavoring to produce medical evidence of chastity as cause for nullity of her marriage. She was, however confined with a child at full term some six months subsequently.

A case came recently under my own observation which illustrates not only features similar to that just cited, but also the peculiar state of the law in Illinois. The case is as follows:

The plaintiff in the case was a twenty-five year old cashier, who, within two months after marriage, filed a bill for divorce on the ground of the defendant's impotence, denying that the nuptials had been consummated, but produced no evidence tending to show she was an intact virgin and refused to submit to examination, in which she was sustained by the lower court. She had previously been engaged, which engagement had been broken off for some reason, according to the defendant, because she suspected the fiancée of being a masturbator, which, however, she denies. It was in evidence and not denied that the plaintiff was extremely variable in disposition, that she had

*J. G. vs. Hg. 23 Indian Reports

†May 1894.

a habit of "lecturing" the defendant on his alleged sexual abnormalities very frequently, that she had the appearance of a morphine user and that she had kept a box containing two grain pills of morphine for some purpose. That in less than a month after marriage she talked freely about her husband's alleged masturbation to a paint merchant and his wife and others whose acquaintance she had made only since her marriage. It was in evidence and not denied that she was sexually inordinate. That there was a property difficulty prominent in her complaint. That she charged the defendant with disinclination to society, with fits of depression, with torpor and refusal to cure himself of his alleged habit. That she claimed that sometimes seminal stains existed which were not seen by any one else, not even the person who washed the stained sheets. That she claimed he ejaculated "all over her everywhere but where he should," as a reason for washing out the vagina with cold water immediately after coitus. That, at her request, before marriage, the defendant purchased emmenagogue pills for some purpose not explained. That she gave him twenty-five grains of sulphonal on one occasion precedent to an attack of torpor which was so prolonged as to attract general attention.

The defendant was an athletic, industrious bookkeeper, a neurotic lithaemic, whose general health is conceded by the plaintiff's attorney to be fairly good, except that he was sometimes "bilious" which "biliousness," in Dr Kiernan's opinion, was lithaemic in character and caused depressed states, disappearing under mercurials and salines. This had been noticed from time to time during seven years by Dr. Kiernan, especially on occasions of business overwork, and neglect of diet. The periods of torpor were two only, both preceded by the use of sulphonal and so unusual as to alarm members of the family, well acquainted with the defendant's habits. This alarm was only allayed by the wife's statement that she had given him sulphonal. He uniformly denied masturbation to his physician, Dr. Kiernan, but the paint merchant claims this was admitted to him in language susceptible, however, of interpretation of inability to satisfy his wife. At her request he consulted first Dr. Kiernan, then Dr. Dewey, whose medicine (sulphonal) he refused to take because of its untoward effects upon him. Against the uniform advice of the physicians, the plaintiff continued to lecture the defendant on his "abuse" of himself up to the time of separation. The defendant presented nothing abnormal to his business associates and fraternity friends who uniformly failed to notice

the society disinclination observed by his wife. He charges that, after finding out his financial status, she nagged him night and day about masturbating and that she circulated widespread reports of his impotency. That such reports were circulated is clear from the evidence of witnesses called by the plaintiff. The defendant claims that in the second month of marriage the plaintiff, believing she was pregnant, ordered him to purchase emmenagogue pills for her. The case was further complicated by the fact that defendant was previously married, while under arrest for bastardy to the mother of his child from whom he later obtained a divorce. She made affidavit in the interest of the second wife without appearing in court, that a child was born two days before marriage, "at the time it was begotten, the father did not have natural sexual intercourse" with her. She "never had natural intercourse" with him and "never had sexual intercourse with anybody else," but "was not going to tell how she knew what the natural way is." Her "position with reference to him at the time of resulting pregnancy (sitting on his lap) enabled him to penetrate." She had intercourse about eight or ten times with him previous to marriage. After enforced marriage he "did not consummate the marriage" by coitus although he "attempted it several times." She never saw any evidences of masturbation. They separated after three weeks and two years later lived together for a short period, during which she was "nervous from his treatment." Her evidence is contradictory; she denies at the onset that masturbation existed previous to separation, but later asseverates he had the habit when she "was first living with him." Despite the fact that she had had a child, he "was unable to penetrate her." Although she stated broadly she never made a charge of impotence up to the time of her examination, she soon after admits having talked it over with the second wife, according to one part of her evidence, spontaneously, according to another, in answer to queries. She admits a strong animus against the husband.

Dr. A. Meyer, for the appellee, in answer to a question, testified that: "Assuming it to be true that after marriage, a very short time, the defendant showed a positive and distinct aversion to the presence and society of his wife, never manifested any affection toward her, but seemed to have aversion for her presence, would indicate, as a matter of probability, that in him there is a settled condition of sexual perversion, making it very probable that

there is no chance of his ever recovering again the possibility of performing coitus with his wife." Again on cross-examination, Dr. Meyer says: "I do not think it is quite common in the case of newly married men with the first few nights that they are excitable and do not consummate marriage as they do afterwards." This statement is certainly at variance with the opinion of most neurologists, psychologists and genito-urinary surgeons.

The patient was examined by myself at the suggestion of Dr. Kiernan. The external organs, penis, scrotum, etc., were entirely normal, apparently in a healthy condition. The endoscopic examination showed a slight congestion of the prostatic urethra, otherwise the urethra was practically that of a normal individual who has never suffered from any venereal disorder. The seminal fluid was pressed out by means of the finger in the rectum and a microscopical examination was made which showed live spermatozoa in large quantities and a little hypersecretion of prostatic fluid. The patient gave no history of venereal disease.

In further examination of Dr. Meyer, in answer to a question, he says: "I know what could be discovered from such an examination as to a man who is charged with being sexually impotent. There would be a number of things, it seems to me, first, in relation to the sexual organs; second, in relation to the general nervous condition, and third, by such examination no absolutely conclusive signs of sexual impotence, but signs of great probability would be discovered."

Certainly from my own examination as given above there were no symptoms present which would lead one to suppose that there was a condition of impotence present; that the man was capable of having erections at times was certainly demonstrated during the examination made, for before proceeding to the examination the patient had an erection.

Dr. Gentles testified that: "Assuming it to be true that this condition [sic] was practiced during boyhood or puberty, it might not necessarily result in impotency. The tendency

of the practice of masturbation would be towards impotence for coition or a perversion of sexual function which would result in impotency. Assuming that defendant during a period of several months was subject to fits, melancholia, depressed and despondent at times, and to a sort of stupor, it would help to bear out the facts that have been given already, that he was a masturbator. Assuming it to be true, during the same time he manifested an aversion to female society, to the presence of his wife or of other women, it would make it almost impossible for him to have coitus with them, and it would indicate one of the results of self-abuse. In my opinion, this defendant is not capable of sexual coitus "

In the cross-examination, he states: "I would not say the man was potent until I had testimony to prove it. Also that nervous apprehension, as to whether he was potent or not, would not be present for 6 or 7 weeks."

The testimony of both of the physicians stands in strange contrast to the conditions found by Dr. Kiernan and myself on examination of the patient. Dr. Gentles' opinion as to the brief duration of mental impotence directly contradicts every author who has discussed the question and conflicts with numerous reported cases.

In the lower court, Judge Smith decided that the defendant was and has since continued impotent in his parts of generation and physically incapable of entering into the marriage state. That he has not been able to consummate and has not consummated his said marriage by sexual intercourse, and that said sexual impotency and physical incapacity are incurable.

An appeal was taken to the Appellate Court on the ground that the decree was not sustained by the evidence and the error of the court in refusing to order a medical examination of both plaintiff and defendant.

The Appellate Court set aside the decree and dismissed the suit. Judge Shepard delivered the following opinion: The statute (Sec. 1. Ch. 40, entitled, Divorce) provides, among other causes, that if "either party at the time of such marriage was, and continues, to be naturally impotent,

it shall be lawful for the injured party to obtain a divorce and dissolution of such marriage contract."

If the condition of impotency on the part of appellant does exist it exists solely because of the degrading habit of self-abuse indulged in by him. There is no malformationⁿ either naturally or by accident, and no disease, except as such a disgusting habit may be properly called a disease, that has occasioned his impotency, if it exist. According to the testimony of two physicians who examined the appellant, his parts of generation were of normal size and his secretions healthy and virile, and he was capable of having an erection. The evidence in behalf of the appellee tended strongly to establish the fact that through long-continued indulgence in self-abuse by the appellant he has become so preverted in mind and body as to deprive him of the present desire and ability to preform the act of coition with his wife, although not as yet to destroy his capacity for self-pleasure and to emit normally virile semen as the result of self-manipulation. Such was undoubtedly the conclusion that the trial court reached and that conclusion would not, after a careful reading of all the evidence, be disturbed, if we were satisfied from the evidence that the condition of appellant in that regard is incurable. Incurable, is in our opinion, what is meant by "naturally," as used in this statute, when applied to impotency. It cannot be required that the condition should have existed always, as from causes existing at birth, in the nature of natural infirmities, to constitute natural impotency for even if such a condition did exist, as in case of a malformation and it was incurable, it would not be a case of impotency against which an injured husband or wife would be entitled to relief by a divorce unless the deformed party should refuse to submit to a cure. Nor would it be a cause of divorce, if the impotency, were natural in the sense that it occurred from disease, unless it were incurable. Therefore it seems to us, both upon^d reason and authority, that to be impotent, as said in the statute, is to be impotent or incapable in the matter of preforming coition with the other sex as nature prompts, and incurably so. And indeed such a meaning would seem to be

found in language of the statute, for it will be observed that it only reads that the party shall be impotent, not only at the time of the marriage, but must continue to be so. The length of time is not prescribed during which the impotency shall continue after marriage, and therefore, it must be for such a time as the court shall, in the exercise of a sound, judicial capacity determine to be sufficient to establish it under the circumstances of each particular case, and it does (4) not seem as if any general rule applicable to all cases can be laid down. The legislature may probably have had in mind as a basis the old ecclesiastical triennial period of cohabitation without consummation, after which impotency would be presumed, and while not intending to recognize that rule or to establish any fixed period, yet recognizing the salutariness of a rule that should require some reasonable period, had, by providing that the incapacity should continue after as well as exist at the time of marriage, intended that the courts should determine it in each particular case upon the facts thereof.

Our Supreme Court has said in *Lorenz vs. Lorenz*, 93 Ill., 377, "The burden of proof was on appellant to establish not only that appellee was impotent, as charged, but also that such impotency is incurable, and that the impotency must exist at the time of the marriage. And so it is held by all authorities. Closely associated with the question of curability is that of whether the party affected will submit to such treatment, whether by self-control alone, or self-control coupled with medical or other applications as will restore his powers. For if, as held in cases of malformation, the person disabled will not submit to treatment that will remove the disability, he will attach to himself all the consequence of permanent and incurable impotency."

There is evidence in the case that strongly tends to prove that all that is required of the appellant is that he should, if addicted to the habit, abstain from it a reasonable length of time, when his powers and desires for sexual intercourse would recuperate. The testimony of the physicians on both sides is, that where impotency is caused by self-abuse potency will be restored by a cessation of the

habit, except perhaps in cases where it has been indulged in to a more destructive extent than should appear from testimony of the two physicians who made a personal examination of appellant, to be the case with the appellant. From the testimony it would seem that in cases of masturbators, impotency arises as much from the mental condition which the vice creates as from any purely physical cause, and that where, as appears to be the case here, the man is generally healthy and strong, the parts of generation normal in size and the secretion virile, a cessation of the practice of the vice would relieve the mind from its debasing effect, and with the mind relieved, the potency for coition with her would be restored. That the appellant was willing to try the effect of medical treatment upon himself, appears in the fact that at the request of his wife he consulted with his family physician, who, testifying in his behalf, stated that the appellee informed him of the appellant's practice of self-abuse, which appellant, in his interview with him, denied, but did say that: "He could not perform sufficient coitus," which explained, perhaps by other portions of the testimony of the same witness, did not mean that he "could not perform coitus at all," but that there was "some sexual irregularity," that he was not "able to give as much satisfaction as seemed to be desired."

An element that the appellant himself says was the occasion of his nervousness and depression, was a constant "nagging" of him by his wife concerning his incapacity as a newly married man. The appellee denies having ever worried beyond upbraiding him for and arresting him in his nasty practices. Placing her construction upon it then, according to the testimony of the physicians in the case, the fact of knowledge by her of his habit would have a tendency to impair his mental regard for her and a cessation of upbraiding or "nagging" by the wife would, we must conclude from the evidence, remove the cause for this trouble between the parties. That being so, the only question is, has the appellant the will-power and will he exercise it, necessary to cure himself? We have seen

that he did at least consult his family physician and as to whether he would do what alone seems to be necessary on his part, assuming the worst against him, it seems, according to the following authority, that the time the parties lived together was too short to test that question.

The case of Stagg, falsely called Edgecombe vs. Edgecombe, is one very similar to this in the facts. There the parties cohabited from marriage on July 2, 1861, until September 27th, of the same year, a period of 87 days, without a consummation of the marriage, and the petition by the woman was for annulment of the marriage on the ground of the impotency of the man. Medical inspectors were appointed at the instance of the petitioner, who personally examined the man, and reported that his external organs of generation "are perfectly natural and well formed and as far as we are able to judge, fully competent to perform their functions." They further reported that the man was 29 years of age and had been "the subject of fits since he was five years of age and that he has practiced excessive masturbation, and has continued to do so since his marriage in 1861. Considering the foregoing fact, we cannot but believe that there is a want of virile power. The long continuance of the fits has no doubt induced a great deficiency in the nervous system, but that is not a sufficient cause of impotence; the more probable cause is one of a mental or normal character, viz: self-abuse; this we know, if carried to any extent, induces an aversion to the female sex. This cause is remediable and remains entirely at the option of the person concerned. Self-control may restore the natural feeling towards the wife, but the continuance of self-abuse will leave matters as they are. It also appears from the evidence that there was a possibility, but not a probability, of the respondent's cure. In the opinion, the court says: "Assuming her (the petitioner) to be a virgin intact, I cannot make a decree prayed for; the medical men negative malformation; they negative impotency from disease or natural infirmity, but they ascribe the nonconsummation of this marriage to temporary incapacity occasioned by the indulgence of a disgust-

ing and degrading habit, and believe that such incapacity will continue until that habit is corrected but no longer. Moreover, the cohabitation continued but little more than two months. Now where any manifest and incurable defect exists, the old rule as to triennial cohabitation has been relaxed, but even in such cases the court has never, that I am aware of, proceeded on so short a cohabitation as in this case. Here I have no right to assume that the incapacity will be permanent, and however painful it may be to the petitioner to assume cohabitation with the respondent, I feel bound to follow the precedent of *Sir George Lee vs. Welde* and dismiss the petition."

Judge Gary gave the following separate opinion. The rule that statutes are to be construed according to the natural and most obvious import of the language, without resorting to subtle and forced construction for the purpose of either limiting or extending their operation has sanction of the Supreme Court and of this Court. The words of the statute are "naturally impotent." If these are to be construed according to that rule, only a congenital incapacity is ground for divorce. We do not say of a man that has lost a limb, or been distorted by accident, that he is naturally deformed, or of one who has from a blow upon the head lost his wits, that he is naturally foolish. Is it true that a girl, young, innocent, ignorant and poor, marrying a millionaire octogenarian, who, if speaking truly, would with Othello say, "the young affects in me defunct," may as soon as she is instructed claim a divorce and liberal alimony? I do not know of any allusion to such a question in any English book, but it would seem from what Gutierrez says, (p.159-162, part 3, Vol. 2, *Codigo de la reform*), that by the canon law such a marriage would be a nullity, but no provision is made in this state for declaring a marriage nullity unless by implication on account of a prior marriage (under Sec. 3,) and it may have been for the purpose of protecting the octogenarian that the word "naturally" was inserted. I do not dissent from the conclusion arrived at by the majority of the court and am not sure that I do from the process.

From a scientific standpoint, the mental peculiarities of the second wife recall the words of Spitzka concerning masturbators: "While there is a remarkable dulness of the normal emotions, there is often an affectation of a high moral tone, aggressively urged, a tendency to denounce normal sexual indulgence, and to suspect the sexual purity of others." One of Spitzka's* patients learned onanism in a convent at 14; married at 20; normal coitus failed to satisfy her and resulted in sexual deficiency accusations against her husband. With such mental peculiarities a masturbator has a decided tendency to suspect masturbation in others, especially when it was supplemented by study of quack literature, as the second wife's charges against her husband amply demonstrate to have existed in her case. Normal coitus cannot be as frequently repeated as masturbation, hence to a masturbator an inability of this type would appear abnormal and denote deficiency. This is well shown in Kiernan's† classifications of perversions. Those which originate in imperative conception; those due to congenital defects; those which are incident to insanity, periods of involution or to neurotic states. Finally, those which result from vice. These last arise from the fact that nerves ^{two} frequently irritated by a given stimulus require a new stimulus to rouse them. This case of the second wife may belong to the last category.

No sexually normal woman would have been so blatantly confidential to comparative strangers of the opposite sex as was the case with the second wife. This blatancy suggested at once hysteric enjoyment of alleged martyrdom coupled with the pruriency of the masturbator. Less than two months is a very brief period for an unsophisticated wife to be certain of incurable impotence. Certainly, it is the shortest period yet allowed as a cause for divorce. Even in the case cited by the Appellate Court, where the impotency was complicated by epilepsy, it was nearly three months. Here the woman had ample justification from the standpoint of disgusting factors. Such a rapid suit for divorce for a cause as likely to stigmatize the woman as

* Journal of Medical Science, 1888.

† Kiernan, Detroit Lancet, 1884,

the man indicates a pruriency strongly suggestive of the fact that too frequent resort to an abnormal sexual stimulus has weakened the normal reaction to coitus.

The question raised by Judge Gary, in regard to the young bride and octogenarian husband, is one of decided forensic interest. Mere old age is not proof positive of incapacity, but as Rosse* remarks is only an indication that may or may not be completed by other proofs as it does not imply absence of procreative power. While admitting age as a presumption, he cites numerous examples of genital activity and of fruitful marriages in very old men. Schneider cites the case of a 26-year old girl impregnated by an 89-year old man. Mende cites the case of an 89-year old man married and the father of 19 children since his 67th year. Sir Stephen Fox married at 77 had four children, one when he was 78, twins when he was 79 and a fourth when he was 81. Thomas Parr was subjected to church discipline for illegitimate parentage at the age of 118, and became legitimately a father at 140. The House of Lords (the English Supreme Court) decided that Lord Banbury was legitimate albeit his father was 80 years old at the time of his birth. The recently published pension office statistics concerning widows of revolutionary soldiers reveal frequent instances of fatherhood after 75. Sir Samuel Romilly claims that the English law cannot recognize old age by itself as implying procreative impossibility. It should, however, be remembered that advanced age raises a presumption to be overcome by evidence. It is a nice question whether, with this presumption, widely believed by the populace, the young girl does not waive, as certainly does the young man who marries an old woman, her rights to raise the question of impotence or sexual incapacity. Lawyer Baldwin,† in discussing the legal aspects of marriage consummation, remarks that under an Indiana decision it is enough if the physical condition admits of copulation, though not of procreation. The right is one which may be waived and is waived when marriage is knowingly contracted with an impotent person or one of so advanced an age that impotence might naturally be expected to exist.

* Witthaus Medical Jurisprudence.

† J. G. vs. H. G., 33 Indiana Report, 401.

An Astral (Theosophic) View of Cholera.

By a New York Physician.

NOTE BY THE EDITOR:—[In connection with the cholera scare in New York we received from a New York physician the following paper which, though not especially appropriate to our pages, will prove, we think, worthy of perusal, if not of special interest to our many readers who are interested in problems of mind and matter and their relations.]

IT is less than seventy years since cholera became a recognized disease in this country and in Europe. The devastating plagues and black vomit were doubtless similar pathological conditions under different names.

There is no epidemic more alarming, none more necessary for state interference for the protection of the people at large, than in this disease. We cope with it, not as it affects the individual, but as it attacks localities and nationalities.

Epidemics are aggressive and threatening in their invasive force, requiring all the tact, talent, wisdom and science of professional and state powers to resist and control them.

In medicine there are few studies so laborious and intricate as the study of epidemics. It is not only coping with a serious case, but is studying and combating a subtle unseen foe, seizing on its victims not like ordinary contagions, but by an extraordinary, influence.

Where a port or a city is infected, all fomites from such infected port should be carefully examined by competent agents and forbidden to be shipped, then where proper sanitary precautions and regulations are enforced on the ship, there will be little danger of an outbreak on ship board. If a person has the germs of infection in his system before he embarks, as the time in transit exceeds the period of incubation, unless there is a contact with cholera patients on

ship, there would hardly be any danger in landing healthy passengers; and while I admire the pluck and executive ability of Dr. Jenkins and give him credit for being thoroughly honest and earnest in all his official acts, at the same time, I cannot help sympathizing with those passengers in the tortures of anxiety and suspense they endured while being held prisoners at Quarantine. It has been demonstrated that cholera has never travelled faster than man himself can travel. The epidemic which reached Europe in 1831 left India in 1815 and was seventeen years in making transit. But when it reached Europe, where a man travels rapidly, its spread was equally rapid and instantaneous. The period of incubation varies from a few hours to usually five days, in some cases apparently to twenty days. The contagious element is primarily in the individual himself, disseminated manifestly through the dejections. The experiments and investigations of Koch and others have manifested to almost a mathematical certainty that the contagion is due to a cholera microbe or bacillus. This may be communicated by the hands of attendants, by bedding or clothing, and even the soil itself may become a most tenacious focus of infection. Pettenkoffer has presented a vast array of facts tending to prove that the poison emanates from the soil. Notwithstanding this, many students of this disease believe and assert that it is not contagious, but that its spread is due to an epidemic influence. In defence of this theory the proof that in places where the plague has raged, it was observed that buboes and swelled glands, non-febrile in character, were very common, also, prior to an epidemic. And also prior to an epidemic of cholera there was a period when diarrhœal diseases were far more prevalent and common though not specially fatal. In yellow fever there is a period that might be termed incubative epidemic. So we may conclude that there are latent germs of these fearful and fatal maladies in the prior epidemics, and where proper sanitation is instituted and maintained during the incubative period the disease may be restricted to this mild form. Notwithstanding all this, modern science has demonstrated that cholera is a specific disease generated by a germ and may be controlled by germicides.

The germs are more easily and generally conveyed by clothing and bedding than in any other way. Consequently it is not necessary to detain a healthy, clean person, but if by any possibility baggage and clothing may contain germs they should be quarantined and cremated or thoroughly renovated and disinfected, before released by the quarantine authorities.

Much fault is found with the Metropolitan Board of Health of this city (New York), but with all the faults and imperfections of that august Board, handicapped as it is by political aspirants and leaders, it has done and is doing a noble work. It has unlimited public funds to draw upon and it should be held to a strict accountability for its acts and its expenditures. This Board was established in 1866 on the very eve of a cholera outbreak and was not in a position then to do the efficient executive work that it should do now. We have had many threatened epidemics in the last twenty-six years, yet they have been met and prevented or stamped out, and we are bound to admit that this has been done chiefly by the organized systematic efforts of this Board.

The great danger to epidemic influences is in the water supply. Now while our croton water is not just as good and pure as it might be, still it is vastly better than that of many or of most cities. Our Croton Water Commissioners ought to be able to make it and keep it the best and purest of any in the world.

It is not my purpose to go into the treatment of cholera, but I will merely state that, as also set forth in a recent number of *Science*, the value of sulphuric and sulphurous acids has long been acknowledged in the treatment of cholera. Professor Koch's statement that the cholera bacilli are more immediately killed by acid and require alkaline media in which to live, goes to substantiate this. Niemeyer also showed long ago that the small lower intestine, that is the one farthest from the normally acid stomach and the most alkaline, was the part pathologically affected in cholera.

I have before me statistics of contagious diseases from 1804 to 1890.

The first record of cholera in this country was in 1832. The population of the city being then less than 228,000 and the deaths from cholera in that year were 3,513. In 1854 there was recorded 872 deaths. In 1844 there were 25 deaths recorded. In 1845, six deaths; in 1848, two, and in 1849, when the population had increased to nearly half a million, the deaths were 5,071. in 1850, fifty-seven deaths were recorded. In 1852, 374; in 1853, thirty-three deaths; in 1854, 2,509; the population being 607,603. In 1855, there were nineteen deaths; in 1856, eight; in 1857, twelve; in 1858, five; in 1859, nine; in 1860, twenty-eight; in 1861, twelve; in 1862, nine; in 1863, nine; in 1864, twelve; in 1865, ten; in 1866, 1,094; in 1867, twenty-six; in 1868, nine; in 1869, six; in 1871, six; in 1872, three; in 1888, nine.

At the Aryan Theosophic Society's rooms at 144 Madison avenue, John M. Pryse once discussed this and kindred subjects as follows:

"Epidemics are of three kinds, mental, moral and physical. The origin of all can be traced to the evil thoughts of men, and the present plague of cholera has its origin far deeper than sanitarians suppose. In the astral—which somewhat corresponds to what modern science calls luminiferous ether—thought takes form and imbues the ether with its character. Charged with the thoughts of men for ages, the ether acts as a powerful hypnotizing veil. Directly and indirectly the ether constantly affects humanity.

"It influences indirectly, because this ether in the ages enters into the mineral kingdom and evolves from that upward through the vegetable and animal to the human stage. Directly it affects this earth, because all matter is but the manifestation of the invisible germ. The astral is the basis of all matter, so the real origin of cholera is not to be found with the dissecting knife. All animalculæ being the manifestation of their ethereal prototypes, the cholera germ is to be found on that plane.

"The reason the thoughts of men affect the ether is because, as declared by Edison, every atom has a life and a degree of consciousness, and men's thoughts are hypnotizing the ether, though invisible atoms. The thoughts of men to-

day are terribly evil, and diseased thought can result only in degenerated morals and diseased manifestation of the germs affected. Hypnotism proves the reality of thought, and how, therefore, can humanity lose sight of the fact that they become evil realities?

"I notice in the newspapers that the Board of Health has cautioned people against getting frightened. Nearly all physicians do this. If thought has no reality how can it possibly attract or repel disease? That would argue that nothing can ward off something. A cycle of 5,000 years will close within a few years, and before the end of the century there will be terrible mental, psychical and physical calamities. The causes stored in the ether will work themselves out into effects before the dawning of the new cycle. There will be wars and cataclysms and disturbances of the earth in many places. Purify your thoughts. Thought is everything. It is the creator and the destroyer."

FOOT NOTE BY THE EDITOR:—[Apropos of the above theosophic view of the relation of the mental state to the susceptibility and spread of cholera which is certainly interesting reading, we may add that the psychical state of the individual undoubtedly influences his resistance and his susceptibility to the cholera poison. To concede this does not, however, imply acquiescence in the above peculiarly novel view of the cause and prevention of the spread of Cholera Asiatica. Nevertheless the subject, as we said in the beginning, makes interesting reading. The Astral is to our present comprehension a little too mystical and undemonstrable to be accepted by science as a fact.]

PUPILLARY DIAGNOSIS.

By ARTHUR E. MINK, M. D., St. Louis.

THE value of the pupil as a diagnostic aid in lesions of the body in general, and that of the nervous system in particular, has long been tacitly recognized by physicians. In spite of this, we think that this subject has been neglected, for we believe that in the systematic study of the pupil we have one of the most important diagnostic aids in medicine. Rightly interpreted, the pupil can give many valuable indications, not only of various affections of the nervous system, but of other and remote organs of the body. It can give us indications of the state of the intra cranial circulation, of depression or exaltation of brain function or of the circulation and function of the spinal cord, and localization of lesions.

More remote organs have also an influence on the pupil, such as various pulmonary lesions, hepatic, renal and intestinal colic, peritonitis and lesions of various intestinal organs, and many more of which we will speak later. The reasons why the pupil is of such value as a diagnostic aid, are manifest.

The connection between the eye and the brain is a genetic one. The iris is supplied by a branch of the ophthalmic artery which is given off from the internal carotid. Both brain and eye are supplied by the same vascular area and by the same vasomotor nerve area. This last fact explains to us why the state of the intra cranial circulation has so much to do with the state of the pupil. Mosso, in fact, speaks of the pupil as the manometer of the vascular system, and, indeed, in it we possess one of nature's instruments for the measurement of variations in the circulation, especially that of the

cerebro-spinal axis. Pain has also a great influence upon pupillary states, as Schiff has shown us when he pointed out the value of the pupil as an esthesiometer.

Before proceeding, we hope the reader will pardon us for reminding him of a few anatomical and physiological facts.

ANATOMICAL AND PHYSIOLOGICAL SKETCH.—There are undoubtedly pupillary centres in the cortex, probably in the Rolandic region and angular gyrus. The pupil contracting centre is normally a reflex one, the afferent tracts being respectively the retina, the optic nerve and tract, the brachia corpora quadrigemina, quadrigemina and the oculo-motor nerve nuclei in the floor of the Aqueduct of Sylvius. The oculo-motor nerve is the efferent path to the iris. As a rule the contraction of the pupil is a reflex act, due to light falling upon the retina and so stimulating the optic nerve. The impulse transmitted thus through the oculo-motor nuclei and nerve causes contraction of the pupil. Sometimes the thought of a bright light has caused contraction of the pupil. The upper pupil dilating centre lies in the medulla oblongata and fibres pass from it through the trigeminus, and others through the lateral columns of the cord where they meet with fibres from the cilio-spinal centre and both sets pass out by the last two cervical and first two dorsal nerves into the cervical sympathetic. It is indeed probable that the dilator centre in the medulla is only the upper end of the cilio-spinal centre of Budge. This last centre is the most important dilating centre. Its upper limits have not yet been accurately defined. Its lower limits vary from the first to the third vertebra, and fibres from it pass into the cervical sympathetic by way of the last two cervical and first two dorsal nerves. Both dilating centres are stimulated by dyspnœic blood.

Physiologically and experimentally, dilatation of the pupil may be produced by section of the optic nerve, by section of the third nerve, by stimulation of the fifth nerve or by painful stimulation of nearly all sensory nerves, which thereby excite the dilating centre of the medulla. Dilatation is also produced by stimulation of the sympathetic and by stimula-

tion of the vaso-motor fibres of the iris. It is also produced by vision of far objects, by rotation of the eyeball outward, by increase of intra-ocular pressure and by stimulation of the margin of the iris or cornea. We find it in inspiration, in dyspnoea and asphyxia. In syncope we have a dilated pupil, and cold and strong muscular contraction have the same effect. Contraction of the pupil occurs on stimulation of the optic or third nerve, upon section of the fifth, on destruction of the cilio-spinal centre. It follows section of the cervical sympathetic. Light falling upon the retina or upon the iris has the same result. Accommodation for a near object, rotating the eyeballs inward and diminution of intra-ocular pressure all have the same effect. The same may be said of sleep, expiration and heat.

PATHOLOGY OF THE PUPIL.—In considering the cause of various pupillary states, we must take into account the intimate relation existing between the functions of the brain in general, the intra-cranial circulation in particular and the state of the pupils. This is caused, not only by the intimate relation existing between the intra-cranial circulation and that of the iris, but also by the state of irritation or depression of the oculo-motor nuclei, as well as the pupillary centres which are undoubtedly situated in the cerebral cortex. These last named centres have not yet been accurately determined, but it is supposed that one is situated in the base of the first and second frontal convolutions, and is connected with the cilio-spinal centre. Irritation of it causes dilatation of the pupil. The other is supposed to be situated in the angular gyrus and connected with the oculo-motor nuclei. Irritation of this centre causes contraction of the pupil. The most important states of the pupil with which we have to deal are, myosis spastica, due to irritation of the contracting centres or nerves and myosis paralytica, due to depression or destruction of the pupil dilating centres or nerves. In antithesis to this we may have mydriasis spastica, due to irritation of the pupil dilating centres or nerves, and mydriasis paralytica, due to depression or destruction of the pupil contracting centres or nerves. We may have other and less important pupillary states, of which we

will speak later on. Now we can establish as a general rule, that any lesion which irritates or exalts the functions of the brain, and so of the intra-cranial circulation, will contract the pupil, and *vice versa*, any lesion which depresses or puts in abeyance the cerebral functions and so the intra-cranial circulation, will cause dilatation of the pupil. We have many proofs of the important influence of the state of the brain and intra-cranial circulation, upon the state of the pupil.

In injury of the brain sufficient to cause suspension of function, the pupils are widely dilated. In peripheral injuries accompanied by great shock which interferes with cerebral function, the pupils are widely dilated. That great surgeon, William Macewen, has made many observations upon surgical cases, which verify this rule. In concussion of the brain in uncomplicated cases, he invariably found the pupil widely dilated. In cases where the concussion was complicated with brain lesion, the pupillary state, due to concussion, passed away, leaving contraction or inequality, due to the concomitant brain lesion. In this way concussion may mask other and more serious brain lesions. Since the time of Astley Cooper and Marshall Hall, it has been known that a certain amount of anemia increases the irritability of the brain, and what we observe in some cases of hemorrhage proves this fact, for loss of blood up to a certain amount causes myosis, but where more blood is lost the pupils become dilated owing to depression of brain function, and become still wider dilated if syncope takes place.

Brown Sequard has shown that if an animal be suspended by the hind legs, the pupil becomes contracted, and we observe the same thing if we lower the head and raise the limbs in cases of severe hemorrhage. Accumulation of carbonic acid in the blood causes dilatation of the pupil by depressing brain function and by stimulating the dilating centre in the medulla. In the action of such narcotics as opium, chloroform and alcohol, we have another example of the influence of the brain and its circulation upon the pupil. In opium poisoning we have a contracted pin-hole pupil, and

so long as this lasts there is still hope, but wide dilatation occurring indicates impending death.

This phenomenon is caused first by depression of brain function and circulation, and by implication of the cardiac and respiratory centres, and secondly by accumulation of carbonic dioxide in the blood which stimulates the dilating centres in the medulla and cilio-spinal region.

In the administration of chloroform, the pupil affords us most valuable indications, for so long as the pupil remains contracted, our patient is safe, but when, owing to abolition of brain function, the pupil becomes dilated, we should immediately lower the head and practice artificial respiration. In acute alcoholic poisoning, we have myosis as long as the functions of the brain are only partially affected; but when the dose is poisonous the pupils become widely dilated.

Macewen pointed out, in 1879, that coma, due to alcohol, can be distinguished from that due to other causes by the fact that the patient when left undisturbed has a pin-hole pupil. If he be then aroused, the pupil slowly dilates, and then left alone, it slowly returns to its former state of myosis. In considering pupillary states systematically, we will begin with myosis.

MYOSIS SPASTICA.—Spastic myosis is due to irritation of the pupil contracting centres or nerves. Light or convergence has no influence upon its size. Mydriatics effect it but feebly, while myotics cause contraction. We have spastic myosis in the earlier stages of pachymeningitis interna hemorrhagica and, also, in the earlier stages of leptomeningitis cerebialis simplex and tuberculosa, when the myosis may be uni or bilateral. In Intra-cranial hemorrhage where it is only sufficient to irritate the brain, we have spastic myosis upon the side of the hemorrhage.

Intra-cranial tumors in their earliest stages can cause uni or bilateral spastic myosis according as they irritate one or both hemispheres. More especially is this the case in the earlier stages of tumors of the corpora quadrigemina, optic thalamus, pons, cerebellum, cerebral peduncles, etc, where they can irritate the pupil contracting centres or nerves. In diffuse basilar syphilitic meningitis we may

have spastic myosis due to irritation of the pupil contracting mechanism. In fractures of the base or vault, we may have uni or bilateral spastic myosis according as the pressure irritates one or both hemispheres. Cerebral congestion can also cause spastic myosis. In the psychoses our knowledge is still extremely unsatisfactory. The author here gives the result of his own observations along with that of other writers. In delirium tremens we often have spastic myosis. In periodical mania spastic myosis is most often found. In mania acuta with great psycho-motor excitement and cerebral fluxion, myosis is found in the great majority of cases, and the same may be said of hallucinatory mania. We may have uni or bilateral myosis in mania alcoholica congestiva. Unilateral myosis is often found in the hallucinatory episodes of melancholia. In the maniacal stage of circular insanity we find myosis spastica as a rule. In parietic dementia, especially in the earlier stages where the cortical nervous discharge is great, we have uni or bilateral spastic myosis. In epileptic insanity myosis may usher in the convulsions, but as a rule the pupils remain normal in psychical equivalents. In periodic melancholia we often have spastic myosis and the same may be said of acute delirium. Myosis is sometimes found in cases of puerperal insanity. Cord lesions which implicate the brain often cause spastic myosis, as in multiple cerebro-spinal sclerosis and locomotor ataxia. We have also spastic myosis in the earlier stages of epidemic cerebro-spinal meningitis.

MYOSIS PARALYTICA.—Paralytic myosis results from depression or destruction of the pupil dilating centres or nerves.

Mydriatics have no influence, while myotics only cause greater contraction. Through concomitant paralysis of the fibres in the sympathetic, which supply Müller's muscle in the lids, the palpebral fissure is often narrowed. One of the most frequent causes of paralytic myosis are spinal lesions extending from the first dorsal vertebra, upward to the medulla oblongata. We have paralytic myosis in later stages of spinal lepto or pachymeningitis involving the cervical portion of the cord, and the same may occur in the

later stages of the hypertrophic pachymeningitis of Charcot. In Pott's disease involving the cervical spine, we may have paralytic myosis in later stages, owing to paralysis of the cilio-spinal centre. In later stages of acute and chronic myelitis involving the cervical cord, we have the same state. Paralytic myosis is observed in poliomyelitis anterior acuta and chronica when involving the cervical cord. The same state is sometimes found in Multiple sclerosis, in posterior spinal and lateral sclerosis. Tumors of the cervical cord in later stages produce the same phenomenon, as do also gunshot wounds and fractures of the cervical spine, by interfering with the cilio-spinal centre or nerves. We often observe paralytic myosis in tumors of the neck which press upon the cervical sympathetic nerve or ganglia, and so interfering with nerve conduction, produce a unilateral paralytic myosis. This state is found in hemicrania sympathico-paralytica. It may be found in later stages of progressive muscular atrophy.

MYDRIASIS SPASTICA.—Spastic mydriasis is caused by irritation of the pupil dilating centres or nerves, and shows a feeble reaction to light, a prompter one to accommodation and a maximal dilatation with mydriatics. This condition is found in hyperæmia of the cord or its membranes, in the earlier stages of acute and chronic myelitis, in earlier stages of tumors involving the cervical cord and irritating the cilio-spinal centre.

Earlier stages of poliomyelitis anterior acuta and chronica involving the cervical cord show the same state, as also does multiple sclerosis, at times, and spinal irritation. The same thing may occur in lateral or posterior spinal sclerosis by irritating the cilio-spinal centre. We find it in the early stages of progressive muscular atrophy and it occurs in cases of bulbar paralysis. It occurs in angina pectoris and the various neuralgias. This occurs, however, very rarely in these lesions. Spastic mydriasis can be caused by great pain, probably through reflex stimulation of the sympathetic or cilio-spinal centre.

More especially is this the case in painful affections of the abdomen and thorax by stimulating the sympathetic. So we have spastic mydriasis in hepatic, renal and lead colic,

in intestinal colic and inflammatory affections of the intestine. The same may be said of abdominal tumors, peritonitis, and helminthiasis and trichinosis. The pupil dilating centers are stimulated by dyspnœic blood and so we frequently find spastic mydriasis in various pulmonary affections, as in phthisis, pneumonia, bronchitis, pleuritis, and asthma. It also occurs in Cheyne-Stokes breathing. The same may be said of various laryngeal affections which produce dyspnœa. This pupillary state is even observed in some cases of cerebral meningitis and encephalitis, where respiration is interfered with. In hemicrania sympathico-tonica we have unilateral spastic mydriasis, and in Basedow's disease, bilateral spastic mydriasis. We can have this state in the earlier stages of Pott's disease, involving the cervical spine. It often occurs in chorea, hysteria and hystero-epilepsy.

MYDRIASIS PARALYTICA.—Paralytic mydriasis is produced by paralysis of the pupil contracting centre or nerves. Contraction of the pupil occurs with difficulty or not at all to light or convergence. Mydriatics produce prompt dilatation, while myotics produce only a feeble contraction. This form of mydriasis occurs particularly in all lesions which depress or put in abeyance, brain function. So it occurs in multiple cerebro-spinal sclerosis, in the later stages of intracranial tumors, in later stages of lepto-meningitis cerebalis and the later stages of pachymeningitis interna hemorrhagica. Cerebral hemorrhage, intra-cranial hemorrhage and thrombosis produce the same state, which may be uni or bilateral, according as one or both hemispheres are interfered with. Hydrocephalus produces the same state, and severe fractures of the base or vault produce paralytic mydriasis, which may be uni or bilateral, according to the extent of the lesion, and the severity of pressure. We have at times a paralytic mydriasis in syphilitic meningitis due to paralysis of branches of the oculo-motor nerve and sometimes non-specific paralysis of this nerve, which also produces a unilateral mydriasis. Dycrasias of the blood, and cachectic conditions frequently have a mydriasis of this type. The mydriasis observed most often in the psychoses of depression or weakness, belongs to this category, owing to the fact that the functions of

the cerebral cortex are partially in abeyance, leaving the subordinate dilating centres free to act. So in later stages of delirium tremens we have this form of mydriasis. It is often found in the exhausted stages of acute mania. In melancholia it is the state most often found. During the abstinence phenomena of morphiomania this state may occur, or we have a shifting mixture of mydriasis and myosis. Paralytic mydriasis occurs in the terminal stages of parietic dementia. It is of frequent occurrence in both acute and chronic alcoholism, and is found in the melancholic stage of circular insanity. In the exhaustion following epileptic attacks, it is often found, and the same occurs in katatonia. This is often found in periodic melancholia. It may occur in later stages of puerperal insanity. We find it both in acute delirium and mania gravis, as well as in acute dementia. The whole subject of pupillary states in the psychoses needs further study.

ARGYLE-ROBERTSON PUPIL.—This form of pupil contracts on accommodation, but not to light. It is due to a lesion affecting the pupil contracting reflex, and the lesion probably affects the tract connecting the opticus with the oculo-motor nuclei. It occurs often in parietic dementia, in tabes dorsalis and rarer in multiple sclerosis. It is also found, at times, in the traumatic neuroses, in "railway spine" and sometimes in diffuse basilar syphilitic meningitis.

We must not forget to speak of various extra-cranial, orbital and intra-ocular lesions, which can produce pupillary disturbances. Iritis produces a contraction not diminished by darkness. Presbyopia and hypermetropia, by causing strain of accommodation, produce contraction of the pupil. Pupillary atresia with posterior synechia produces contraction. In micropia there is a state of extreme contraction. In coloboma, congenital or after iridectomy we have irregularity and immobility of the pupil. Dilatation of the pupils occurs in amblyopia and amaurosis. In hippus we have alternate contraction and dilatation accompanied by nystagmus.

Inequality of the pupils exist in different degrees of refraction in the two eyes. Episcleritis, keratitis, scleritis and cyclitis are accompanied by spastic myosis. The myosis

observed in the acute exanthemata is caused by ciliary irritation. Orbital tumors or injuries, sufficient only to irritate the oculo-motor or its branches, may produce spastic myosis. Where they are severe enough to produce paralysis of the oculo-motor nerve or its branches, we may have a unilateral paralytic mydriasis.

The following is a list of the principal mydriatic and myotic drugs:—

MYDRIATICS. Anesthetics, atropine, pseudotropine, tropine, belladonna, belladonnine, benzoyltropine, hyoscyne, hyoscyamine, pseudohyoscyamine, hyoscyamus, daturine, duboisine, gelsemine locally, homatropine, muscarine, narcis-sine, piturine and stramonium.

MYOTICS. Anesthetics, calabar bean, gelsemine (internally), jaborandi, lobeline (internally), morphine (internally), muscarine (internally), muscarine (locally), nicotine (locally), opium, eserine and pilocarpin.

When we examine the pupil, we should pay attention to the size, shape, activity and any equality. When examining them the patient should face a source of light. We should then close both eyes and after a few seconds open both. We can then observe whether they contract equally to light. Then close one eye and see if when opened there is immediate contraction of the pupil, and if there is simultaneous contraction of the other pupil. We should do the same for the opposite eye.

Many pupilometers have been devised. Among the best are Gorham's, Hutchinson's and Browne's.

Gorham's instrument can be used as a pupilometer or photometer. It consists of a piece of bronze tubing 1.9 inches long and 1.5 inches in diameter. One end is closed by a cap, which is pierced in its radii by a series of holes running from .05 to .28 inches. A slot in the cap allows one pair of holes to be visible at a time. In using the instrument as a pupilometer, look through the open end of the tube with both eyes open towards a sheet of white paper or the sky when two disks of light will be seen. Revolve the cap slowly until the two white disks just touch each other at their edges. The decimal fraction

opposite the two apertures, seen on the scale outside, gives the diameter of the pupil in 100ths of an inch.

Hutchinson's pupilometer is much simpler, consisting of a disk of polished steel with holes punched in it, or a narrow white card having on it a series of black dots, measuring from one to nine millimetres. It is placed close to the eye. The dot corresponding in size with the pupil is noted and its size in millimetres read off. Browne's instrument is about the same thing on a narrow strip of steel.

CORRECTIONS.

On page 191, tenth line from top, read concomitant "or" for concomitant of.

On page 209, second line from top, read "whilom" for whilsome.



PARANOIA OF CAIN.

A PARODY IN PSYCHIATRY.

By C. H. HUGHES, M. D.

AS a sample of psychological reasoning to a psychiatric end, let us take up a historical record and reason upon the facts, omitting the factor of demonstrable disease, and reach the kind of conclusion at which so many non-expert doctors without special experience with insanity often arrive when handling the grave problems of mental aberration.

Many of the data of mental alienation (without the factor of proven disease) are those of rational moral or mental perversion, and the alienist is seldom absolutely safe in his conclusions of insanity without concomitant of clearly proven disease involving brain and mind. The best and truest and only satisfactory criterion is the presence of proven and demonstrable cerebro-mental disease and change of character consequent thereon, especially in the direction of symptomatic exaggeration.

THE PARANOIA OF CAIN.

(*Para*, in the Greek, signifying beyond, and *noien*, to comprehend or understand, *ergo*, a condition of mind beyond comprehension).

Very far back in the annals of time, almost in the beginning thereof, as we learn from sacred story, history gives us record of a woman who was very peculiar in her mind, very peculiar even for a woman. She was possessed of a singular and single serpentine auditory hallucination, which speedily became transformed into a delusion of grandeur and great importance. She heard a serpent speak. The serpent told her that she and her husband should "become as gods and live forever" if they ate of a certain fruit that grew in a certain garden of many fruits. The fruit was not her property. It was on a reservation which neither belonged to her nor her husband, though they had possession of, and

had free access to, all the other trees of the garden and the fruit thereof. Her husband seemed satisfied with the conditions of possession and got along very well with the fruit of the other trees, but the woman was seized with a sudden kleptomania, and yielding to the morbid impulse and the auditory hallucinations, she stole the fruit which was not hers, and which she had been forbidden to eat, and did eat of it. She liked the taste of it, found it good, and persuaded her husband to eat likewise. Delusions of grandeur seized her, and a delirium of ambition manifested itself in the way her lovely and persuasive feminine descendents have ever done since, in a desire for dress, and her first dress was an apron of fig leaves. Her husband did not seem to care a fig for such clothing, but she made a similar dress for him, and she through insanity and he through his imbecility (her hypnotic influence) went about in their new aprons, fancying themselves sufficiently clothed. In fact, it appears that all the time before this event, neither seemed to realize that they had no clothes on. They were a pair o'noiacs. They knew each other, but not neurology.

And she conceived and bare a son whom she called Cain, and said, "I have gotten a man from the Lord"—another delusion. She was likewise a kleptomaniac and the victim of an *arbor vitæ* delusion, because she stole fruit from the tree of life for which she had no use and which was positively hurtful to her, under the delusion that it would be good for her, if she ate it, and give her everlasting life.

"And she again bare him a son." The one was "a keeper of sheep," and the other was "a tiller of the ground." The latter was named Cain and the other Abel.

The father of these boys was a victim of melancholia, eating his bread "in sorrow all the days of his life," and the mother was likewise a melancholiac, her "sorrow being greatly multiplied."

"In process of time it came to pass" that one of these sons, Cain, "brought of the fruit of the ground an offering unto the Lord," and the other, Abel, "brought of the firstlings of his flock and of the fat thereof." And the Lord had

respect unto Abel and his offerings, but unto Cain and his offerings he had no respect.

You see Cain's *ergo* was delusionally exalted. He thought a very little gift from him was a great recognition of the Lord and would go a long way in His sight, but the Lord did not see it in that light. "And Cain was very wroth and his countenance fell," and Cain forthwith developed paranoiacal delusions of suspicion and persecution towards Abel, and under the baneful influence of adverse environment and the tyranny of an inherently bad organization, which he had inherited from his unfortunate neuropathic parents, these paranoiacal delusions developed into a resistless impulsion to destroy the object of his suspicion. "And Cain talked with Abel his brother. And it came to pass when they were in the field, that Cain rose up against his brother and slew him."

Though Abel was Cain's victim, poor Cain was likewise the victim of latent inherent psycho-neuropathic degeneracy brought about by his lonely and isolated life, he being a tiller of the soil and by himself, having not even sheep for company, as Abel had, with a possible malarial factor superadded, for he tilled a virgin soil in which malaria probably abounded.

The Lord appears to have been a little severe on Cain in his punishment for this unavoidable homicide, owing to the fact, doubtless, that he was not familiar with the extenuating potency of paranoia in defense of crime. Nor would he, if he had understood the subject as expounded by some of the latest insanity experts, have permitted Cain to imigrate to the land of Nod and raise a neuropathic family and build a city of paranoiacal neuropaths, for from this unfortunate mistake of the Almighty in regard to Cain and Adam and Eve, came, through atavic descent, the homicidal insanity of the later descendant, Lanech, the paroenia (next akin to paranoia,) of Noah, the exalted delusions of the Babel-builders, *et id omne genus paranoiae*.

RECAPITULATION.

Now to recapitulate the salient points of this diagnosis, we have:

1st. Delusional insanity at least in one of the parents and imbecility in the other, hence mental defect in both immediate ancestors. They were naked and unconscious of the fact—delusion.

2nd. They thought fig leaves clothed them—delusion.

3rd. The mother was evidently the most markedly insane, the father being rather weak in mind, or imbecile, than insane, as men often are when under the dominion of woman. "The woman tempted him and he did eat" at her bidding. She overpersuaded him as she is proverbially capable of doing.

4th. Delusions of seeing and hearing in the mother. She saw and heard a subtle serpent talk to her.

5th. Delusions of Longevity—one of the *arbor vite* delusions already referred to. She expected to live forever after eating the fruit of the tree of life.

6th. Delusions of personal importance. Exaltation of the *ego*. In the woman, from insanity; in the man, from imbecility and hypnotic influence of the woman. "They should be as gods."

From the mentally defective and insane ancestry sprung the boy who murdered his brother without real provocation or cause. The mother especially was insane and it is the law that the mental traits of the mother descend to the sons, while those of the father pass on to the girls. Thus through the fatal tyranny of an inherently defective psychoneuro-pathic organization, Cain was not able to resist the homicidal impulse to kill his brother.

The very nature of the act proves Cain's innocence. Abel gave Cain no adequate provocation. It was a causeless killing due to delusions of suspicion and of persecution, and hence an irresponsible homicide.

Finally, Cain was always a peculiar person. He lived by himself, tilled the soil and got full of Malaria and ideas of persecution and bad treatment, and after he had killed Abel, the Lord did not destroy him, but put the mark of paranoia upon him and he was a peculiar paranoiac ever afterward.

Moral. The strength of the chain depends more on the

quality and integrity, than on the size and number, of its several links, and

“From (paranoia’s) chain, whatever link you strike,

“Tenth or ten-thousandth, breaks the chain alike.”

You see a paranoiac is born badly balanced in brain and is bound to break or bend or bust something sometime in the battle of life.

SELECTIONS.

NEUROTHERAPY.

STAMMERING AND ITS TREATMENT.—Coxwell (*Intercoln. Quart. Jour. Med.* 1894; *Brit. Med. Jour.*, Dec. 15, 1894; p. 93.) discusses this subject from a neurological standpoint. After showing that the stammerer is never amnesic, and that the trouble of utterance is aggravated by ill-health, nervousness, etc., the author states that the fault lies in a paralysis of some part of the articulatory or phonatory mechanism plus excessive activity or even spasm of other parts. It is different from affections like writer's cramp, which are brought on by overuse of the organ; dysphemia does not result from overuse. Singing, from its rhythm and continuous flow, is easier to the stammerer than ordinary speech, which changes rapidly in time and rate of flow. The author locates it in Broca's centre, and postulates two conditions to explain it, namely (a), a want of power (paresis) in some of the articulatory nerve mechanisms of that centre, and (b), a want of accurate regulation of that centre, owing to defective control of it by higher centres. Hence the treatment is two-fold, namely, generally tonic, and specially gymnastic. Generally tonic: Regulated outdoor exercise, shower baths, and nerve tonics, (quinine, strychnine, phosphorus, or Fellow's syrup). Vocal gymnastic: Daily practice in uttering the simple vowel sounds, at first slowly and then more rapidly, and after good proficiency is attained to add consonants. The patient should next practice reading aloud daily, mastering every difficulty only by slow and assiduous practice. Simple narrative reading should precede dialogue. Patience and steady practice (including vocal or singing exercises), should be combined, but always stopping short of actual fatigue. The author states that he has cured many in this way, the treatment taking several months.—*American Medico-Surgical Bulletin.*

SYMPTOMS WHICH SIMULATE DISEASE OF THE PELVIC ORGANS IN WOMEN.—Dr. A. Rabagliati (*Arch. Gynec*) says the condition often described as ovarian neuralgia is, as a rule, neither ovarian nor neuralgic, though both may coexist; but essentially a rheumatic perimysitis, due to improper nutrition and the absence of proper exercises in the open air, and can be cured without operation. In such cases it is assumed that there is no gross disease of the pelvic organs beyond, perhaps, a slight displacement of the uterus or its appendages, and in them oophorectomy is, in my opinion, an unjustifiable operation; a much better procedure is my own operation of cutting down on the umbilicus, rawing the surfaces and bringing them together, though, as a rule, not even this is necessary. In the examination of these women, we find tenderness of the oblique muscles of the abdomen, of the recti muscles, of the umbilicus itself, of the quadratus lumborum muscles, of the sacro-iliac synchondrosis, and also of the sacral origin of the glutei maximi. This tenderness, I think, explains the complaint usually made by these women of being constantly tired. The kind of pain is an aching one, such as is associated with trouble in the muscles, rather than numbness, tingling or smarting, such as characterize nervous involvement. Other muscles may also be affected, such as the solæi and gastrocnemei, the quadriceps extensors, etc. Minor degrees of disease of the uterine appendages may of course coincide with this condition, but the latter is really the main cause of the patient's suffering. There are many reasons for believing that this muscle trouble is rheumatic in character, and these have led me to designate the affection as perimysitis rheumatica. The principal cause is, I believe, the improper feeding of these women, especially the bread and tea which they take in such large quantities. The best treatment is to place them on a liberal diet, combating the rheumatism by appropriate remedies and washing out the waste with hot water taken an hour after food three times a day. I wish to lay great stress also on the value of bathing followed by methodical exercises calculated to put into action the disused muscles.

SUCCESSFUL SOLUTION OF PHOSPHATE OF SODIUM.

—Melachol, an agreeable liquid preparation of Phosphate of Sodium, Citric Acid and Sodium Nitrate, is replacing the "true and tried" Phosphate of Soda in Neurasthenia, Melancholia, Hysteria, etc., in which there is a sluggish action of the Liver, Kidneys and Bowels, and a poorly nourished nervous system.

STRYCHNINE IN NERVOUS COUGH.—Dr. L. Lichtwitz, (Sem. Med., 1894; XIV, p. cclxvi), says: The best treatment of nervous cough of central origin (in choreic, tabetic and hysteric patients), which differs from ordinary cough by the nearly complete absence of expectoration and by habituality disappearing at night, consists in the administration of strychnine in large doses. He begins with 6 milligrammes of strychnine sulphate per day, increasing by 1 milligramme every second day until a daily dose of 8 to 9 milligrammes has been reached. The medication is suspended at the end of two weeks, to be resumed a week later. If no result is obtained after the second week of treatment, Dr. L. resorts to electricity, massage, or hydrotherapy; or prescribes a change of climate—sojourn in the mountains.

PSYCHIATRY.

GOLD AS AN APHRODISIAC.—Ohmann-Dumesnil, in the *New York Medical Journal* of Feb. 20, says: The most active salt of gold is the bromide, and it is particularly so upon the nervous structures, but small doses being necessary to produce effects. The action of gold is essentially that of an alterative. It has no cumulative effect; but when toxic doses are administered, mental excitement, amounting to delirium at times manifests itself. A prominent symptom of its excessive action is an excessive flow of saliva, the so-called *aurism*. One feature which has been particularly noticed in connection with mercauro is its marked aphrodisiac properties.

HEREDITY; ITS RELATIONS TO INSANITY AND IDIOCY.—Dr. John B. Chapin in a paper on this subject

(Philadelphia Polyclinic) presents the following conclusions:

1. Physical characteristics, those distinguishing the human species, are transmissible as an inheritance.

2. Knowledge, genius and culture are not an inheritance, but depend rather on influence, education and environment. Mental receptivity is transmissible. Psychic qualities are not necessarily an inheritance, requiring favorable surroundings and circumstances for growth and development.

3. Insanity as a disease is not transmissible by inheritance, but may be acquired or envolved from a neurotic heredity as a basis.

4. A neurotic predisposition is transmissible by inheritance, but there is no absolute rule that it will be transmitted in any given case or in any case.

5. In-breeding of neurotic temperaments is most conducive to the creation of a neurotic heredity.

6. Idiocy and imbecility may be a defect, having an origin in consanguineous marriages, pre-natal conditions, accidents, arrested development, infantile meningitis, tuberculosis and lack of potency on the part of one of the parents from unexplainable causes.

OPIUM DELUSIONS.—Recently some very marked examples of delusions in opium cases have been noted in the daily press. A prominent woman telephoned the police station that a murder was committed in the house adjoining, and urged them to come at once. The patrol wagon with officers reached the house in a few moments, and found no one stirring; two servants were working before an open window, and the lady of the house was asleep. The accuser described, with great minuteness of detail, two women fighting, and a man rushing in and stabbing one, then disappearing. This was seen from her window. When told that she was mistaken, she became very angry and positive of her impressions. The two servants working before the open window formed the basis of her delusion. Later it was found that she was using opium daily.

A well dressed man, with a bruised face and some head wounds, appeared at the police station and gave a minute

detail of an assault by a leading merchant, who attempted to kill him. The motive was supposed to be political, to prevent him from securing a nomination the other wished. All the circumstances of meeting, and exchange of blows, and violent language, and his escape by jumping over some rocks near the roadside, were given with graphic exactness. An examination proved that the merchant was in a distant city at the time, and no assault had been committed by any one. The supposed victim was an opium-taker, and had no doubt jumped over a rocky ledge, bruising himself. He was on good terms with the merchant, and never had quarreled in any way.

The following case was submitted to me for examination and opinion. A widow of wealth, culture, and the highest respectability, charged her physician, an eminent man, with committing a criminal assault. The physician was astonished. This lady was supposed to be in excellent health, and had not called on him professionally for years. He was a friend of her husband, and only called at long intervals, and usually on some mission of charity.

The alleged offense was affirmed to have been committed at night, and the lady was so overwhelmed that she remained in bed for two days. A week later she confided to her clergyman, and he called in a lawyer, and a meeting was held. The doctor was emphatic in his denial, and the lady was positive in her convictions. It appeared that the doctor had called that evening, about seven o'clock and remained a short time. He came to announce the death of a distant relative of the lady in a foreign country, who was traveling with his son. Later the doctor accompanied his wife to the theater, and remained at home all that night. The lady's statement was that the assault was made late at night, then she changed and said it was early in the evening, and then she was so confused that the exact time was not clear. The very unusual feature was the apparent unimpeachable integrity of both parties. There had been a feeling of profound respect between them, and no intimacy or familiarity. The physician seldom called except on some

errand, and the lady was apparently strong and actively engaged in charity and the management of her property.

In my interview with this lady, there was no appearance of vindictive anger, only deep sorrow, and her statement was clear and natural in all its details. The pupils of the eyes had a suspicious contraction, and she spoke of some neuralgia, for which she used McMunn's elixir. She acknowledged having used this drug the day of the assault, and in larger quantities for several days after. I found from the druggist that she used large quantities of this drug at different times, although never seemingly stupid from the use of it. I concluded that if this was an opium delusion, she would have another attack, so the decision was postponed. Ten weeks later, she asserted that the same physician had visited her room at midnight and assaulted her the second time. The physician at the time was on the ocean with his wife, going to Bermuda, having sailed two days before the alleged act was committed. This woman was declared an opium-eater and went under treatment, from which she recovered, and no return of this delusion followed.

Fortunately these delusions are not very common, and are so often mixed up with circumstances that indicate their real condition as not to be mistaken.—*Journal of Inebriety*.

THE INFLUENCE OF THE ABORTIVE TREATMENT OF SYPHILIS ON THE NERVOUS SYSTEM.—Deutsch (*Archiv f Derm. u Syph.*) calls attention to the fact that symptoms of involvement of the nervous system are often among the first of those which show that syphilis has become a constitutional disease. Thus, among the prodromatic, pain in the head, kidneys, psychical disturbances, pallor and nausea are well recognized, and are attributed by Lang to meningeal irritation. Occasionally sluggishness or inequality of the pupils is noticed, neuralgia, greediness, excessive thirst or drenching sweats, all these signs denoting irritation of the brain and its meninges. A similar condition of the spinal cord and its envelopes is indicated in the prodromal and exanthematous period by very marked in-

crease in the reflex excitability of the skin and tendons, followed by a rapid diminution, sometimes amounting to complete absence, which may last for several weeks after the exanthemata have disappeared. All these signs show early involvement of the nervous system, and suggest the advisability of attacking the poison at the earliest possible moment and weakening its virulence. As a matter of personal experience, Deutsch states that in patients who were treated with mercury early—that is, immediately after the appearance of the chancre, or at least before the development of secondaries—symptoms denoting involvement of the nervous system did not develop; whilst in those not treated until secondaries were well marked, such symptoms were the rule. Moreover, so far as tertiary manifestations are concerned, these did not attack the nervous system in cases which received early treatment.

CAUSE AND PREMONITORY SYMPTOMS OF CEREBRAL HEMORRHAGE.—Dr. C. L. Dana (*Boston Med. and Surg. Jour.*) reports 100 consecutive cases of apoplexy with hemiplegia observed at his clinic at the Post-Graduate Hospital and 79 cases of apoplexy with autopsy observed in Bellevue Hospital. Thirty of the latter came under his personal care and observation.

Of 100 non-fatal cases 36 were due to syphilis. The special characteristics of the cases due to syphilis are that they occur in early life, that they are often multiple in character, and that the pathological condition underlying them is usually a thrombosis and softening.

So far as his experience and records went, cerebral hemorrhages are rarely repeated, and it seems as if in many cases the rupture of an artery changed the vital conditions, as it certainly does the personal habits, so that the attack exercised a conservative influence upon the individual and actually tended to prolong life.

A FATAL CASE OF ANOREXIA NERVOSA.—C. F. Marshall, M. D. Vict., F. R. C. S. Eng., reports in the *London Lancet* in connection with fatal cases of anorexia ner-

vosa, an interesting example of which appeared in the *Lancet* of Jan. 5th, 1895, the following:

A girl, said to be eleven years of age, but who looked nearly fourteen years old, was admitted to the North Eastern Children's Hospital on May 10th, 1890. The history was only of one week's loss of flesh, anorexia, and vomiting. Four years previously she was said to have had similar attacks. On examination she was found to be extremely emaciated, but there were no signs of organic disease. She had a wild, hysterical appearance, was very restless, and refused all food; her bodily strength, however, was greater than would be supposed from her extreme emaciation. (The abdomen was so sunken that the vertebral column could be easily felt). As she refused all food she was fed on enemata of peptonised milk, beef tea, and brandy. In two or three days peptonised milk and beef tea were taken by the mouth in small and frequent doses. In ten days she could take a moderate diet by the mouth, but suffered from diarrhoea. On the thirteenth day after admission she rapidly became worse, the temperature rose to 102° F., and the fifteenth day she died. At the necropsy some old caseous foci were found at the base of the left lung; the stomach was congested with scattered ecchymoses; the other organs were normal. The case was diagnosed as probably one of anorexia nervosa, but in spite of the great emaciation no fatal issue was apprehended until two days before death. This diagnosis was, in the absence of any lesion to account for death and in the absence of diabetes, supported by the post-mortem examination. The presence of the old tuberculous foci in the lungs is of interest, in that this disease was supposed to originate from latent tuberculosis; but in the above case the tubercle was too small in extent and too localized to have been a factor in the cause of death, which was presumably due to the inanition having proceeded too far for recovery before systematic and regular treatment was begun. Dr. Lasegue, writing on this disease in 1873, states that death in such cases is never due primarily to the anorexia, but to some secondary disease such as tubercle occurring while the patient is in a lowered condition. Sir William

Gull, on the other hand, records a fatal case with no organic changes except thrombosis of the femoral veins.—*London Lancet*.

THE CAUSES AND INCREASE OF GENERAL PARALYSIS.—R. v. Krafft-Ebing (*Allg. med. Centralzeitung*, No. 36) says: a real increase in the prevalence of General Paralysis can be proved. The almost unanimous experience of alienists is that general paralysis is on the increase amongst the civilized nations, whilst the milder* functional mental disorders (*Psychoneuroses*) show a corresponding decrease. And this is the case although the disease has at present a tendency to assume the quiet, simple atrophic form, which can be more easily treated at home, so that the figure furnished by the asylums are much below the actual numbers. Moreau, in 1850, was the first to show that there was an increase in general paralysis in the large asylums of Paris. Regis reported in 1885 that in some of the French asylums the increase amounted to 33 per cent. Figures furnished by Althaus, of London, show a similar increase in England. Speaking of the causes, in addition to the generally-recognized ones, *e g.*, excesses of all kinds, Krafft-Ebing assigns a very important place to syphilis, and quoted Rieger, of Wurzburg, who found that in 1,000 non-paralytic mental cases, only 39 had a history of syphilis; whilst of 1,000 paralytic, 400 had syphilis. But the majority of investigators give even a higher percentage, *e g.*, Oebeke, who, amongst the upper classes, found it to reach 73 per cent., but in the lower it amounted to only 16.7 per cent. The paralysis most frequently manifests itself between the fifth and fifteenth years after infection, which partially explains why the victims are in the middle of life.

A CONTRIBUTION TO THE MORBID ANATOMY AND PATHOLOGY OF THE NEURO-MUSCULAR CHANGES IN GENERAL PARALYSIS OF THE INSANE.—Alfred W. Campbell (*Journ. of Pathol. and Bacteriol. Ref. in Yorkshire Med. Quart.*, III, 1894; p. 65) says:—An exhaustive examination of twelve cases yielded the following results: The vagus showed extensive neuritis, more marked and more con-

stantly than any other nerve. The mixed spinal nerves showed distinct proof of parenchymatous and interstitial neuritis more marked near their terminations, toward the extremities, than in the trunks. This fact corroborates Goodall, and his observation of the consonant blocking of the smaller arteries of the nerves, and of the great preponderance of small nerve fibres in the inflamed and atrophied nerves is also confirmed by Campbell.

He considers the small nerve fibers as reversion to the embryonic type. The vascular blocking, which is not confined to the nerves of general paretics, though not syphilitic, is yet obscure. The anterior spinal roots were also found to be diseased, and the cranial nerves showed some interstitial neuritis. The nuclei of origin of the cranial nerves and the nerve cells of the spinal cord showed some atrophy, pigmentation, etc., but in no case was this central disease sufficient to explain the extent of the disease in the nerve trunks. The muscles examined gave evidence of fatty degeneration, atrophy and proliferation of the nuclei, of the sarcolemma and connective tissue.

The author suggests that, as a diphtheritic, alcoholic, and some other forms of neuritis, the cause of the practically universal neuritis in general paralysis is toxic, being as yet wholly undetermined. This marked neuritis explains the cardiac affections from the conditions of the vagus, the hyperæsthesia and subsequent anæsthesia in the limbs, and other symptoms.

SYPHILIS AS A CAUSE OF PARETIC DEMENTIA.—The *Journal of Medical Science* contains an article on this subject by Dr. Emil Haugberg, in which he reports syphilis to have been present in eighty-one per cent of his cases, and probably so in eleven per cent. more, or ninety-two per cent. The disease usually follows four or five years after an attack of syphilis of a mild character. His cases following syphilis did not present a clinical picture differing from those in which syphilis might be excluded, nor do the cases preceded by this disease show any characteristic signs of syphilis at the autopsy. He thinks no benefit is to be derived from anti-syphilitic treatment.

ANARCHY A PSYCHICAL MALADY.—Fifty years ago an eccentric, impulsive individual lived at Dresden. He came from Russia, whence he had been banished. This man was Bakunin, whom Tourguenieff had welcomed at his home. Superb, of athletic build, wearing abundant hair and a beard which made him resemble a lion, an excellent friend and a good-hearted fellow at bottom, he possessed, moreover, a vast erudition. He had the mania for destruction to a point so extreme that if one did not take care to distract his attention he could not look for some time at any object without wishing to break it into pieces. An idea of his state of mind may be formed from the following anecdote.

At a dinner given on the occasion of the marriage of one of his friends, and at which he had fulfilled the functions of a groomsman, he committed the most extravagant acts. He had constructed with the crockery and glasses a sort of scaffold, which the assistant feared would fall at any moment. He was persuaded to undo his work, piece by piece, instead of throwing it down at one blow, in the same manner as he wished to destroy all the governments of Europe. But he was so excited that he took a Bohemian glass, broke it with his teeth, and swallowed the pieces. A scalp disease compelled him to shave his head and he wore a wig, which he took off whenever he was not in a public place; that is, when in a friend's house or wherever he was a guest, without caring for the opinion of those to whom he thus exposed the anatomy of his denuded cranium.

It is this maniac who is justly considered as the father of Nihilism and of dynamitic anarchy, extraordinary theories, worthy children of such a father; dreams and chimeras emanating from ill-balanced brains and which dreamers are seeking to materialize into a simple doctrine for the use of the desperate.

Anarchy is a psychical malady recognizing as a predisposing cause a particular state of mind, determined principally by: I. Insufficient knowledge of human nature; II. A susceptibility painfully impressed by personal suffering and the misery of others; III. Materialistic superstition.—*Paul Gibier, in North American Review.*

CLINICAL NEUROLOGY.

THE DIFFERENT FORMS OF SCIATICA AND THEIR TREATMENT.—Schreiber (Prag. med. Woch.; XIX, No. 24; p. 205) divides the affections, which are often loosely grouped under the term “sciatica,” into the following classes:

1. True sciatica, in which the pain is apt to correspond closely to the course of the nerve and is likely to occur in more or less distinct attacks, with intervals of freedom from pain and of free motion of the limb.

2. Pain along the course of the sciatic nerve due to pressure from tumors, exudates, etc., within the pelvis and in the region of the sciatic notch.

The cause here may usually be recognized by careful physical examination.

3. The pains of *tabes dorsalis*, which are to be recognized by their transient character, their severity, their sudden onset and disappearance, and by their failure to conform in distribution to any single nerve trunk. The favorite sites for these pains are the knee, the crest of the tibia, and the dorsum, and sole of the foot. Since the pains are usually among the earlier symptoms of *tabes*, other signs of the disease are not always to be found.

4. Rheumatic processes of the muscles, tendons, ligaments, and fascia in the neighborhood of the hip-joint. This condition differs from true sciatica, especially in the continuance of the symptoms. There is usually not the intervals of freedom from pain, and the passive movements of the thigh are apt to be much more restricted and painful. Moreover, tender points corresponding to insertion or origin of some of the muscles may often be found.

The treatment varies with the character of the affection. In one case of intractable sciatica, an enlargement of the bone in the neighborhood of the sciatic foramen was recognized. As there was a history of old syphilitic infection the patient was put upon vigorous anti-syphilitic treatment, and a permanent cure was affected.

The writer believes suitable electric or hydropathic treat-

ment will, in many instances, give much relief, yet in the obstinate cases the most satisfactory result can be obtained from a combination of massage with a systematic course of mechano-gymnastic treatment. This is especially true for those cases of chronic rheumatic affection of the fibrous tissues in the neighborhood of the hip.

EDITORIALS.

[All Unsigned Editorials are Written by the Editor.]

The Fallen Aesthete.—Contumely has at last come to this whilsome apostle of a degenerate aestheticism. Society will no longer go wild on Oscar. The author of *Dorian Gray*, divested of the peacock feathers of a false fame and of the sunflower reputation he bore before that falsely aesthetic world of follies, fads and fancies, that worshipped him and which called itself good society, now languishes in meditation mad behind the bars of Scotland yards without the benefit of bail, charged and tacitly connected of un-namable crimes against nature.

This Sybarite, son of respectable parentage who pronounced the sunflower the *ultima thule* of the beautiful and characterized everything in the true normal aesthetics of normal mankind as awry and abnormal, whose morbid egoism perverted his inherent literary aptitudes and acquired knowledge into antagonism to most of the natural, normal and accepted as proper, in literature, art and morals, has passed naturally into the nasty æstheticism of morbid erotism and "sexual perversion".

Wilde is a warning example, of which there are many in our day, of writers of influence and culture who, inadequately trained in their inhibitory centers and with morbid egoism, neuropathic instability, psychopathic impulsions and beginning moral decadence from a better ancestry, are influenced and have unduly influenced certain portions of society to the detriment of the psychical stability of, at least, a portion of mankind and the highest welfare of public morals. He had the gift of hereditary literary aptitude for writing, but he soiled his pen by dipping it in immoral ink and re-colored his natural acquisitions with a pernicious, false and poisonous moral coloring.

He appears to be a degenerate, though talented, pervert, a thing not uncommon in psychopathia sexualis, a pseudo-æsthetic reformer of culture, a bazarre literary neuropath who believed "there was no sin", as Max Nordau has said of him, "except the sin of stupidity", and that ideas that are not dangerous are not worthy of being called ideas.

To him nothing finally seemed so good as that which

is naughty and thus his æstheticism and his philosophy have come to naught, though the evil they have done will not subside with the ended career of this pseudo-æsthetic neuropathic pervert.

Society is itself becoming neuropathic—constantly seeking and applauding the sensational, because it is in harmony with neurotic instability.

To the under-toned nerve cords of society's members, the bazarre is mistaken for the beautiful, and the loud, great, in letters and art. Educated wealth is in certain channels breeding luxurious neuropathic decadence, and all prosperity that develops degeneracy of this kind and its attendant, Sybariticism, is a failure which can only end in moral and race extinction.

For many years a whole literature of romance and plays has been occupied in the description of Lesbian love, as Gustave Bouchereau says in the dictionary of Psychological Medicine, to the great damage of young girls and neuropathic women.

"We have exchanged our ancient usages and opinions, as Esquirol observes, for speculative ideas and dangerous innovations."

"The depravation of both mind and morals, which are effected by the vices of our education, by disdain for religious beliefs and the faultiness of public morals, exercises its influence upon all classes."

Wilde may be a platonic lover tinctured with erotic perversion and morbid erotism, who has fallen in with coarser natures more bestial than himself. The extremes of excessive purity and perversion in love, as in religion, are sometimes not remote apart. In the neuropathic, extremes often meet.

American Medico-Psychological Association.—

The first session of the 51st annual meeting of the American Medico-Psychological Association will be held at the Brown Palace Hotel, Denver, Colorado, upon Tuesday, June 11th, 1895, at 10 A. M. The succeeding sessions will continue on Wednesday and Thursday, and probably a portion of Friday. A large attendance of members of the Association is promised from the North-West and the Mississippi Valley. It is hoped that a special effort will be made by those residing East and South to be present, in view of the reduction of railway fares which has been secured. The Chairman of the Committee of Arrangements announces that a rate of \$3.00 per day has been secured for members and their families at the Brown Palace Hotel at Denver, that an excursion rate of

one fare and one-third has been made from Missouri River points, with a slight increase over these from eastern points, and that probably a rate of one fare and one-third from all eastern and southern points will eventually be secured; that an excursion over the Denver & Rio Grande Railway to Glenwood at a very moderate rate has been arranged, and that other attractive excursions have been planned. It is requested that all members of the Association arrange to stop at the Brown Palace Hotel.

The Secretary requests all who desire to present papers or communications to send the title of the same promptly to him, so that a programme may be arranged and distributed prior to the meeting.

HENRY M. HURD, Secretary, Baltimore, Md.

The Annual Meeting of the American Medical Publishers' Association will be held in Baltimore, on May 6th., convening in the parlors of the Eutaw House, at 9:30, A. M. An interesting program is announced.

Maltine with Cocoa Wine.—In the later management of the opium psychoneurosis and earlier sequences of chronic alcoholism after the withdrawal of the toxic agents causing the conditions requiring our attention, Maltine with Cocoa wine is an especially good temporary substitute and prop to employ pending the more permanent and final reconstruction of the damaged nerve centers of chronic alcohol and opium habitudes. It sustains while we rebuild. It is certainly a good and acceptable nutrient in these shattered states of the nervous system. Of this much we are assured from personal observation, and the compound is not unacceptable to these patients. When the heart is enfeebled, digitalis and the compound hypophosphites may added with signal benefit.

Thus much in answer to numerous inquiries concerning the employment of these agencies, to save letters, for the writing of which, we have not the requisite time at our disposal.

Dr. Benjamin Rush's View of Preventive Sanitation:—"To every natural evil the Author of Nature has kindly prepared an antidote. Pestilential fevers furnish no exception to this remark. The means of preventing them are as much under the power of human reason and industry, as the means of preventing the evils of lightning and common fire. I am so satisfied of the truth of this opinion, that I look for a time when our courts of law shall punish cities and villages, for permitting any of the

sources of bilious and malignant fevers to exist within their jurisdiction."

American Neurological Association.—The twenty-first Annual Meeting of the American Neurological Association will be held at Boston, Mass., on Wednesday, Thursday and Friday, June 5th, 6th, and 7th, 1895.

There will be two sessions daily, one from 10 A. M. to 12:30 P. M., the other from 2 P. M. to 4:30 P. M.

Every member is solicited to contribute something of interest to the programme.

The Secretary calls your attention to the following article of the By-Laws:

ART. IV. The title of all papers to be read at any Annual Meeting must be forwarded to the Corresponding Secretary not later than three weeks before the first day of the session.

Also to the following articles of the Constitution:

ART. IV. Applications for Active Membership shall be made in writing by an Active member at least two weeks before the session at which they are to be voted on. The Secretary shall notify each Active member of said nomination, provided, that by the unanimous consent an application for membership may be made at one session of a meeting and acted on at the next session.

ART. V. No one shall be eligible for Active Membership unless he has previously submitted a paper embodying original research which has not been previously published, on some subject connected with Neurological Science, which shall be referred to the Council for examination and report.

The Council desires to state that in all cases these laws will be interpreted literally

The annual dinner will be held on Thursday Evening, June 6th.

GRAEME M. HAMMOND, M.D., Secretary and Treasurer,
58 West 45th, St., New York.

Weather Bureau Work Enlarged.—The following circular on Sanitary Climatology issued by the Weather Bureau of the U. S. Department of Agriculture will interest our readers and find general Medical approbation:

The interest manifested by every class of people in the subject of climate and its influence on health and disease, has decided the Honorable Secretary of Agriculture, through the medium of the Weather Bureau, to undertake the systematic investigation of the subject.

It is hoped to make the proposed investigation of interest and value to all, but especially to the medical and sanitary professions, and to the large number of persons who seek, by visitation of health resorts and change of climate, either to restore health or prolong lives incurably affected or to ward off threatened disease.

The study of the climates of the country in connection with the indigenous diseases should be of material service to every community, in showing to what degree local climatic peculiarities may favor or combat the development of the different diseases, and by suggesting, in many instances, supplementary sanitary precautions; also by indicating to what part of the country invalids and health seekers may be sent to find climatic surroundings best adapted to the alleviation or cure of their particular cases.

The hearty cooperation of the various boards of health, public sanitary authorities, sanitary associations and societies, and of physicians who may feel an interest in the work, is asked to achieve and perfect the aims of this investigation.

No compensation can be offered for this cooperation other than to send, free of cost, the publications of the Bureau bearing upon climatology and its relation to health and disease to all those who assist in the work.

Cooperation will consist in sending to this office reports of vital statistics from the various localities. That these reports may be of value, it is evident to all that they should be accurate and complete, and be rendered promptly and regularly. Blank forms of reports have been prepared so as to occasion as little trouble and labor as possible on the part of the reporter, and will be furnished by the Bureau on application.

At the very beginning of the investigation it is not possible to outline precisely the channels through which the results obtained will be made public, but it is hoped to publish soon a periodical devoted to climatology and its relations to health and disease. The publication will probably resemble in size and general appearance the present *Monthly Weather Bureau*, the subject matter being, of course, different.

More detailed information will be furnished on application.

MARK W. HARRINGTON,
Chief of Bureau.

It is not, however, a little humiliating to the great medical profession, greatest of all professions in its work for the welfare of man, that it should have to serve the people in the subordinate attitude of *attaché* to the Weather Bureau.

It is now about time that this great profession of ours be represented and the peoples' interest looked after by a State Bureau of Medicine with a Representative Chief in the Cabinet of the Nation. Medicine has long been too modest in asserting its claims.

Review of Insanity and Nervous Diseases.—Dr. J. H. McBride, editor of the *Review of Insanity and Nervous Diseases*, and Superintendent of the Milwaukee Sanitarium, will leave soon for a well deserved and much needed rest.

We regret the suspension of this valuable periodical, and hope that the early restoration to health and vigor of its editor will result in its revival.

Bromidia in Italy.—Dr. R. Cantalupi, writing from Naples, Italy, says:

Bromidia has produced successful results in all the most varied forms of Insomnia. Among others who have been benefited by its use is Professor Cesare Olivieri, well known as a most distinguished surgeon in this city, and who, after undergoing tracheotomy for neoplasm in the larynx, suffered terribly from Insomnia, which the usual hypnotics all failed to relieve. Hearing of this from a mutual friend, I advised the use of Bromidia, which promptly produced the desired result.

The Zander Institute, of St. Louis, wherein are employed under skillful medical direction and the prescriptions of the patient's outside physician, all the well known and most approved methods of the Swedish-Movement Cure, is worthy of the fullest confidence of the readers of this Journal. We speak from personal knowledge of the institution and its capable and professional management.

A New Medical Journal.—We have received a copy of the first number of *Medicine*, a monthly journal of medicine and surgery, edited by Harold N. Moyer, M. D., of Chicago, and published by Mr. Geo. S. Davis, of Detroit, Mich.

Though we are not enlightened as to the special niche this journal is calculated to fill in the crowded field of medical journalism—not even an apology is made for its appearance—the names of its editor and publisher are a guarantee of a high standard.

CORRESPONDENCE.

NEW YORK, March 9, 1895.

Dr. C. H. HUGHES:

DEAR SIR: The following is a statement of the contributions received to date to the Charcot Monument Fund:—

New York City: Drs. E. C. Seguin, \$50; M. A. Starr, \$50; E. D. Fisher, \$50; C. L. Dana, \$20; C. A. Herter, \$50; A. Jacobi, \$10; Fredrick Peterson, \$10; B. Sachs, \$25; Geo. W. Jacoby, \$10; Ralph R. Parsons, \$5; J. A. Booth, \$2; J. F. Terriberry, \$2; D. Webster, \$1; Samuel B. Lyon, \$5. Philadelphia; Philadelphia Neurological Society, \$150. Baltimore; Dr. Wm. Osler, \$50. Pittsburgh; Through Dr. T. Diller, \$58. Montreal; Through Dr. James Stewart, \$19. Boston; Drs. J. J. Putnam, \$5; P. C. Knapp, \$5; Medico-Psychological Society, \$25. Buffalo; Through Dr. J. W. Putnam, \$15. Denver; Through Dr. H. T. Pershing, \$10. St. Louis; Drs. L. Bremer, \$10; C. H. Hughes, \$5. Chicago; Dr. Arch. Church, \$5; Total, \$647.

Very truly yours,

C. A. HERTER, M. D., Sec.,

819 Madison Ave.

[Send in your contributions to the above fund, brother Neurologists, and when you shall have done so, double the amount to similarly honor the memory of our own immortal Rush, the pioneer alienist, the American patriot and phil-anthropist.]

IN MEMORIAM.

DANIEL HACK TUKE, L. L. D. GLASG., F. R. C. P.
LOND., M. R. C. S. Eng., M. D. HEIDELB.

The following details of the life of Dr. Hack Tuke and estimate of his work will be of interest to his many friends and admirers. Daniel Hack Tuke was born at York on April 19th, 1827. He was the youngest son of Samuel Tuke and the great grandson of William Tuke, the founder of the York Retreat, whose work in connection with the humane treatment of the insane was on the same lines as that of Pinel in France, though the two laboured independently of each other. Dr. Tuke was delicate as a child, but he was remarkable, even in those early days, for his high spirit, which seemed to carry him through his trouble in an unexpected way. Although his schooling was often interrupted by illness, he was always busy with learning of some sort or other or investigating on his own account. As an instance of this early scientific spirit may be mentioned a journey to the woods with the household cat, which he there deposited in the hope of some day finding it as a wild-cat. Samuel Tuke, his father, was a well-known Quaker, and his son was accordingly brought up in the family traditions, and in due time, when his health would allow, he attended as day scholar at a Friends' school. Later he went to another Friends' school at Tottenham, where he numbered among his schoolfellows some who have since become eminent. When his school education was finished he was thought to have such a legal mind that he was sent to Bradford to study law, but three months of this were quite enough for him, and he was at last allowed to begin the study of medicine, for which he longed. At about this period he seems to have held the post of steward at the York Retreat. He next came up to London, about the year 1849, entering at St. Bartholomew's Hospital. In 1852 he took the membership of the Royal College of Surgeons of England, and in 1853 he graduated M. D. at Heidelberg. In this same year he married, and went abroad

to visit the asylums of Holland, Germany, and France. In 1854 he published his first work, an account of these visits. He was now appointed visiting physician to the York Retreat and to the York Dispensary, and about this time he held the Lectureship of Psychology at the York School of Medicine. In 1857, on the death of his father, it was decided that the old family house in Lawrence street, York, should be converted into a private asylum for ladies. This scheme, to which he looked forward with great eagerness, was frustrated by a serious attack of hemorrhage from the lungs, which obliged him to give up practice entirely and to go south. After a year of wandering he settled in Falmouth, where he lived for fifteen years. Here, with improved health, he soon began to take an active interest in town matters, such as the library, British schools, workingmen's club, etc., and at the same time he did much literary work, maintaining throughout the keenest interest in all things relating to psychology and the insane. In 1874 he came to London, where after a time he settled and gradually resumed practice, unable to resist the temptation so to do. Among his greatest pleasures at this time were his frequent visits to Bethlem Hospital, of which institution he subsequently became a governor; and when within the last year or two he was obliged on account of pressure of work to forego these visits, he felt it as a great trial. In 1882, his eldest son, William Samuel Tuke, died at Bournemouth. This was a terrible blow to Dr. Tuke, who had set high hopes on his medical career, which as many of W. S. Tuke's fellow students will remember, had promised brilliantly. Dr. Tuke subsequently took up his residence at Hanwell, where the proximity of the asylum proved a great attraction to him. Here he continued to reside till the time of his death, coming up to London daily to his consulting-rooms in Welbeck street. It was at the latter place, just after his arrival on the morning of March 2nd, that he was suddenly seized with left-sided hemiplegia. After a few hours of incomplete consciousness, Dr. Tuke gradually lapsed into a coma, which lasted till his death at four o'clock of the morning of Tuesday, the 5th.

A prominent feature in Dr. Tuke's life was his indifference to the pleasures of the table; a meal would never stand be-

tween him and his work, and his family would alternately scold and smile at his ridiculous snatch luncheons of buns and glasses of ginger beer. Of Dr.^e Tuke's kindness of heart, we think many must have a record. He was most genial and sociable by nature, and the meeting of his friends and colleagues was the chief attraction to him at social gatherings, which he invariably enjoyed. He liked to talk over matters of all kinds, but philosophical subjects and religious questions attracted him most outside the domain of medicine, and such readings and conversations were his relaxation. He was sometimes affectionately taxed by his home circle with being sentimental; but whilst it was quite true that "sentiment" was ingrained in his fibre, as many little relics and hoardings would testify, his nature was far too simple and honest to allow of anything that savoured of the unreal. He was rather fond of poetry—Tennyson and Whittier being, perhaps, his favorite authors. He was certainly a hero-worshipper, and when engaged in this cult would take minute pains to learn all he could about the object of his affection. Hampden was thus much in his mind when he was at Oxford last year. Dr. Tuke had many devoted friends among young men—he was so exceedingly kind to them and would help them whenever he could. A letter written by a medical friend whom he valued much described him as possessing "the gift of inspiring friendship"—it was quite true.

In endeavouring to form a true estimate of the value of the work of Dr. Hack Tuke we cannot but feel that it is difficult at present to appreciate its various parts at their just value, but yet we think it is a proper time to note the nature and quantity of what he has done, and its apparent influence on English psychiatry. Dr. Tuke had a power of continued intellectual work such as is given to very few, and which we are almost inclined to say is given most commonly to those who are not physically robust; he worked regularly till the early morning hours in his study and yet was regular in his London professional work. He always got a clear notion of the end he was aiming at, and never rested or turned till he had reached it. Steady, persistent observation with methodical recording and arranging of facts was his chief power, for,

though not, as we have hinted above, without poetical feeling and sentiment, yet he was not imaginative, and he was rather a receiver and a recorder than an originator. He was the cool-eyed observer of nature, and not the far-seeing prophet. We have heard him described as a scientific sponge, taking up greedily whatever was presented to him and rendering it back uncoloured by any personal tint. His memory for facts and details was till the end extraordinary, and a case once registered in his mind was always fit to be brought out for use when the proper occasion came. We believe that he will live, if for no other work, as the historian of lunacy and its humane treatment in the nineteenth century. He knew the actors and their works personally, and in an absolutely truthful way gave the results. Dr. Tuke was not a clinical teacher, nor did he add much to the purely scientific medical knowledge of his specialty. He was a great reader of the works and observations of others and for years was a constant frequenter of the wards and the post-mortem room of Bethlem Hospital. We think that he expected to find more physical change than was generally visible to the naked eye and often left a necropsy with feelings of disappointment and yet with the hope that the time would come when the physical side of insanity would be more demonstrable. Kindly and considerate for all, his mind was a sort of balance for the weighing of scientific truth. No man and no man's works were better known all over the world, and he had visited most of the asylums in Europe and America, never losing a chance of picking up the threads which connected the present with the past. He knew the City of the Simple (Gheel) in Belgium and the secluded valley in Ireland where priest-healing had held sway. His holidays were combinations of the study of asylums with (insufficient) complete relaxation. As we have already said, he was judicial in the extreme, and though he might have strong personal feeling, by education or association, he was ever ready to hear the other side; thus, though a strong and persistent believer in non-restraint and in the humane treatment of the insane, he was quite able to see that cases might arise in which mechanical restraint might be the most humane treatment; and quite recently he expressed himself strongly that he hoped

panic and sensational writing would not prevent the judicious use of baths and the pack. Dr. Tuke's earliest established work was in connection with Sir [then Dr.] Charles Bucknill, and "Bucknill and Tuke" still holds its place as a monument of work. Later the "Influence of Mind on the Body" occupied him, and he always had a very strong personal affection for this book, which, though at its time of great value, has now been left behind. Yet it was an early record and comprised a collection of facts of great value. Though not imaginative, Dr. Tuke was a very thoughtful and careful student of hypnotism and lost no opportunity to see its legitimate development. Another special subject to which he devoted great thought and attention was moral insanity. He took a very definite position, in which he differed from some of his oldest friends, and to the end he believed in a form of insanity in which the social side was chiefly or altogether at fault, while the higher intellectual powers were intact or but slightly affected. He recently wrote a small book on the development of this idea by Prichard and Symonds.

For nearly eighteen years Dr. Hack Tuke bore the weight of editing the *Journal of Mental Science*, and no labour was too much for him to undertake and carry through for the perfect and exact editing of that journal. He not only carried out the ordinary work, but added an Index Medicus of great and lasting value. Friends believed that Dr. Tuke's hands were already full, but yet he undertook the "Dictionary of Psychological Medicine," and, knowing exactly whom to get as assistants, he produced this splendid book, which must long be the text-book for all medico-psychological subjects. Dr. Tuke's life was not devoted only to book work; he was not forgetful of the patients in and out of asylums, and was one of the originators of the "After-care" Association for patients who, having left asylums, were not fit for full work, and who needed a kind of convalescent home where they could give evidence of their real fitness to return to their ordinary work. Dr. Tuke was chairman of this association at the time of his death. For years he was a regular attendant, not only at the courts of governors of Bethlem and Bridewell Royal Hospitals, but he attended

the weekly committees and knew every patient who was admitted, and thus his life was full of work and thought. Of late years, with all this work, he was a busy consultant whose opinion was regarded as of the first value. He did too much, but he would himself have chosen to die in harness. No one can tell the amount of good he did by that influence which is only recognized when it is lost, but the younger men in the special branch of medicine to which he was attached looked upon him as the "grand old man."

He was a representative man in the special sphere of work to which he had devoted, and even sacrificed, all his life and energies, and it is difficult to see who is to fill the gap which his death has caused amongst the practical workers in medical psychology. The simplicity of his funeral was in keeping with that of his character, and it was felt by all his colleagues who attended on that occasion that the grave had closed over all that was mortal of a worthy, loved, and highly esteemed brother.

AMERICAN NEUROLOGICAL ASSOCIATION

Preliminary Programme of papers to be read at the Twenty-first Annual Meeting to be held in Boston, on June 5th, 6th and 7th, 1895, at the Hall of the Boston Society of National History, corner of Berkeley and Boylston Streets:

Insanity and Phthisis, their Concurrence, Coexistence and Transmutation, by Dr. H. A. Tomlinson, of St. Peter.—The Etiology of Obstetrical Paralysis, Prevention of a Brain Tumor. Exhibition of a Specimen showing Fracture of the Cervical Verbræ. By Dr. George L. Walton, of Boston.—A Lantern Exhibition of Photo-micrographs of Nervous Histology; Golgi Stains, by Dr. M. Allen Starr, of New York.—A Contribution to the Pathology and Morbid Anatomy of Amyotrophic Lateral Sclerosis, by Dr. Joseph Collins, of New York.—The Conservative Value of the Play Impulse, by Dr. Irving C. Rosse, of Washington.—Must Acute Paranoia be admitted into our Nomenclature? by Dr. Wm. Noyes, of Foxboro.—Auto-mimesis, by Dr. Smith Baker, of Utica.—A case of Hereditary Chorea with Autopsy, by Dr. Charles L. Dana, of New York.—Cases of Brain Tumor, and A case of Total Hysterical Anæsthesia in the Male, by Dr. George J. Preston, of Baltimore.—Telegrapher's Paralysis, by Dr. James Hendrie Lloyd, of Philadelphia.—The Diagnosis of Hemorrhagic Cerebral Pachymeningitis, by Dr. William N. Bullard, of Boston.—The Association of Tabes and Paralytic Dementia, by Dr. Theodore Diller, of Pittsburgh.—The Localization of Small Gross Lesions in the Pons and Preoblongata, by Dr. Charles K. Mills, of Philadelphia.—Report of a case of Peroneal Muscular Atrophy with Autopsy, by Dr. William C. Krauss, of Buffalo.—The Home Treatment of Insanity, by Dr. H. M. Bannister, of Chicago.—The Criminal Insane Abroad, by Dr. C. Eugene Riggs, of St. Paul.—Report of a case of Tumor of the Cerebellum, with Autopsy: Operation by Dr. John F. Erdmann, by Dr.

E. D. Fisher, of New York.—Hyperostosis Cranii (Megalocephalie) with Illustrations, by Dr. James J. Putnam, of Boston.—The Pulse in insanity—Original Study of Cases, by Dr. Theodore H. Kellog, of Willard.—Report of a case of Multiple Neuritis in an Infant, by Dr. Graeme M. Hammond, of New York.—Two cases of “Railway Spine” with Autopsy, by Dr. F. X. Dercum, of Philadelphia.—Fissural Studies. (a) Two Philosophers. (b) An apparent Duplication of the Central Fissures, by Dr. Burt G. Wilder, of Ithaca.

GRAEME M. HAMMOND, M. D.,

Secretary.

REVIEWS, BOOK NOTICES, ETC.

SUGGESTIVE THERAPEUTICS IN PSYCHOPATHIA SEXUALIS; with Especial Reference to Contrary Sexual Instinct. By Dr. A. von Schrenck-Notzing (Munich, Germany). Authorized translation from the German by Charles Gilbert Chaddock, M. D., Professor of Diseases of the Nervous System, Marion-Sims College of Medicine, St. Louis; member of the American Medico-Psychological Association; attending Neurologist to the Rebekah Hospital, St. Louis, Mo., etc., etc. One volume, Royal Octavo, 325 pages. Extra cloth, \$2.50 net; Sheep, \$3.50 net. Sold only by subscription to the medical profession exclusively. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry Street.

Suggestive Therapeutics has proven in the hand of the distinguished authors a most valuable remedy, and as the condition of psychopathia sexualis itself is one calling for psychical remedy, it would seem especially proper that Suggestive Therapeutics should be employed. The thanks of the profession are due to the author abroad and the able translator in the United States for the presentation of the subject as it appears in the work before us. Dr. Chaddock has given as smooth a translation as the authors have a readable and instructive volume.

ASTIGMATISM AS A FACTOR IN THE CAUSATION OF MYOPIA, by Leartus Connor, A. M., M. D.

In this paper Dr. Connor defines the myopic eye anatomically and as viewed with the optalmoscope, and says it is an acquired condition, being rarely congenital. It is most frequent among those who live in cities and use their eyes much at close work and in those of feeble constitutions. Among the causes, he cites the astigmatic eye as the most important. With uncorrected astigmatism the eye is always in a strain, and this persistent strain leads to a stretching and yielding of the coats of the eye, so that a hypermetropic astigmatism first passes over into a mixed, and then a myopic and finally a compound myopic astigmatism. In other words there is a constant increase in the refraction of all the meridians of the eye, the disparity usually continuing throughout, hence the rare cases of myopia without astigmatism. Dr. Connor believes with Dr. Risley, whom he gives due credit for his labors in establishing this fact, that the early correction of all cases of astigmatism will prevent myopia. Dr. Risley, in the July, 1894, number of the Archives of Ophthalmology, tabulates 200,000 refraction cases collected from records covering a period of twenty years, from which he shows a gradual decline in both the proportion of myopic eyes and the degree of myopes under the effect of wearing correcting glasses. Dr. Connor adds his own observation to the above, extending over a period of twenty-three years, and corroborates the statement that the way to prevent myopia is to fully correct all astigmatic errors in early life. This is a matter of such vast importance to the public welfare that legal restraints should be put upon the prescribing of spectacles. In other words, a qualification test should be required of those who fit eyes with glasses. T. E. MURRELL.

THE STANDARD DICTIONARY.—Volume II of Funk & Wagnall's Standard Dictionary of the English language, completing this excellent work, is on our table where it will remain for daily reference, notwithstanding we have the new Century and the latest Webster in our sanctum editorial. The great amount of expert labor spent upon the volume, no fewer than two hundred and forty-seven specialists and other editors have been engaged upon it—many of these having world-wide reputations for expert knowledge and scholarship, and the reception that has been accorded the preceding volume by leading critics in such Universities as Harvard, Yale and Johns Hopkins in this country, Cambridge and Oxford in England, and by the press in the English-speaking countries of the world, commended it first to us in consideration, and its daily use for editorial reference has served to confirm the high estimate of the utility and value based upon these facts. It has met all our requirements as an editor and teacher and will disappoint no one who may rely upon it. It is the latest and best of the several good and great dictionaries of late offered for public use and approbation. The medical portion of the editorial staff is a guarantee of accuracy and completeness. It includes such capable men as Frank P. Foster, T. Mitchell Prudden, Frank Baker and Chas. S. Dolly, while the Aboriginal, Anglo-Indian and Spanish-American terms are edited by Daniel G. Brinton, M. D. and John W. Palmer, M. D., who enjoy the confidence of the medico-scientific world.

This has been an expensive undertaking to the publishers, the work having cost over \$960,000 before a completed copy was ready for the market, and nearly five years of literary labor since its commencement.

C. H. HUGHES, M. D.

DEGENERATION, by Max Nordau, has been translated from the second edition of the German work and put before American readers in attractive form by the D. Appleton Company of New York. There are peculiarities of thought and treatment of this subject in this book, such as make it an indispensable addition to the library of the psychologist and psychiatrist, especially in the chapter on the psychology of egomania and mysticism, the two principal chapters of the volume. Among the other subjects are, the pre-raphaelites, realism, pamassians and diabolists, decadents and aesthetes. The book concludes with a prognosis and therapeutics for the twentieth century.

SURGERY TWO HUNDRED YEARS AGO. We have received with the compliments of the Antikamnia Chemical Company a brochure on "Surgery Two Hundred Years Ago," which will interest the junior members of the medical profession who may not yet have found time to search the ponderous tomes of the part for the surgical method of the fathers. Both the text proper and the illustrations will be found of interest.

DISEASES OF THE NERVOUS SYSTEM, Gowers: Blakiston & Son, Publishers, Philadelphia. The second volume fulfills the high promise of the first and the reader's exacted expectations based upon the author's great ability as a teacher and practitioner of neurology are nowhere disappointed in the pages of this second volume of one of the very best of neurological classics.

C. H. HUGHES.

Case of General Paralysis of the Insane in a Child. By John Thompson, M. D., F. R. C. P. Edin., Extra Physician to the Royal Hospital for Sick Children, Edinburgh, and W. R. Dawson, M. D. Dubl., Assistant Medical Superintendent of Farnham House Private Asylum, Finglas, Dublin; and Demonstrator of Pathology, Royal College of Surgeons in Ireland.

Left Hemiplegia Followed by Loss of the Deep and Superficial Reflexes, Considerable Muscular Atrophy, Marked Anæsthesia in the Distal Portions of the Limbs, Loss of Faradaic Irritability, and Reaction of Degeneration of the Muscles on the Paralyzed Side. By J. T. Eskridge, M. D., Denver, Col.

The Possibility of Obtaining Marked Improvement in the Treatment of Deafness and Supposed Deaf-Mutism by Acoustic Gymnastics—a System of Vocal Training of the Auditory Nerve, as Advocated by Professor Urbantschitsch of Vienna. By Dr. M. A. Goldstein, St. Louis, Mo.

La Confusion Mentale Primitive, Stupidité, Démence Aigue, Stupeur Primitive. Par Le Dr. Ph. Chaslin, Médecin Adjoint de L'Hospice de Bicêtre, etc., etc. Paris, Asselin et Houzeau. Libraires de la Faculté de Médecine, Place l'Ecole de Médecine.

Syphilis and Alcoholism of the Brain, Spinal Cord, and probably of the Nerves of the Legs, followed by Hysterical Contractures of the Flexors of the Knees, and a Pronounced Variability of Certain Reflexes. By J. T. Eskridge, M. D., Denver, Colo.

Some Reasons Why More Original Investigation and More Literary Work is not done by the Physicians in Large Public Hospitals for the Insane, with a Suggestion of Certain Remedial Measures. By Ralph Wait Parsons, M. D., Sing Sing, N. Y.

Subcortical Glioma of the Cerebrum Affecting Principally the Arm Centre; Removal; Recurrence of the Growth; Second Operation; Recovery. Case of Professors H. C. Wood and J. William White, reported by Alfred C. Wood, M. D., Philadelphia, Pa.

Laminectomy for Paraplegia from Pott's Disease; Tenotomy of Contractured Hamstring Tendons of Both Legs; Amputation at the Hip-Joint; Appendicitis; Stone in the Bladder; Suprapubic Lithotomy. By F. C. Schaefer, M. D., Chicago, Ill.

Ueber den Einfluss der durch die Stimmgabelschwingungen herbeigeführten Erschütterungen auf den menschlichen Organismus. Von Prof. W. v. Bechterew in St. Petersburg. Nach den Untersuchungen von Dr. N. Tschigajew.

Antero-Lateral Sclerosis; Posterior Sclerosis; Pathology and Treatment of Locomotor Ataxia by Suspension and by Apparatus. By De Forrest Willard, M. D., and Guy Hinsdale, M. D., Philadelphia, Pa.

The Prevention and Treatment of Ophthalmia Neonatorum, and the Necessity for More Efficient Legislation to Prevent Blindness from this Cause. By Charles H. May, M. D., New York.

Etude sur La Pathologie de la Paralyse Progressive par Le Dr. Paul Kovalevsky, Professeur des maladies nerveuses et mentales à l'Université de Charkoff, Charkow, Russia.

Cylindroma Endothelioides of the Dura Mater Causing Localizing Symptoms and Early Muscular Atrophy. By L. Bremer, M. D., and N. B. Carson, M. D., of St. Louis, Mo.

Ueber die Blutcirculation im Grosshirn während der Anfälle experimenteller Epilepsie. Nach den Beobachtungen von Dr. A. Todorski. Von Prof. W. v. Bechterew.

Rapport and Memoires sur L'Education des Enfants Normaux et Anormaux par E. Seguin. Preface par Bourneville, Redacteur en chef du Progres Medical.

New and Important Pharmaceutical Product. The Glycero-Acid Phosphate—A Brain and Nerve Tissue Chemical Food. By Edward C. Mann, M. D., New York.

Appendicitis. Further Consideration of this Subject, with Tabulated Report of Cases not Previously Published. By John B. Murphy, A. M., M. D., Chicago, Ill.

Removal of the Head of the femur From the Lesser Sciatic Notch. Castration for Hypertrophied Prostate. By B. Merrill Ricketts, Cincinnati, O.

Relation of Infectious Processes to Diseases of the Nervous System. Pathology and Etiology. By James Jackson Putnam, M. D., Boston, Mass.

The Relation of Static Disturbances of the Abdominal Viscera to Displacements of the Pelvic Organs. By J. H. Kellogg, M. D., Battle Creek, Mich.

Multiple Neuritis, with the Development of Unilateral Facial Paralysis Late in the Course of the Disease. By J. T. Eskridge, M. D., Denver, Col.

Abdominal Hysterectomy With Clamps—A Rapid and Safe Method of Removing the Uterus. By Emory Lanphear, M. D., Ph. D., St. Louis, Mo.

“Horse-Nettle” in the treatment of Epilepsy. By E. D. Bondurant, M. D., Assistant Superintendent of the Alabama Insane Hospital, Tuscaloosa, Ala.

Typhoid Ulcer; Perforation (?); Operation; Death. Cerebral Cyst; Operation; Recovery. By B. Merrill Ricketts, Ph. B., M. D., Cincinnati, O.

Transactions of the American Neurological Association. Twentieth Annual Meeting held at Washington, D. C., May 30, 31st and June 1st, 1894.

Five Year's Work in Diseases of the Rectum at the New York Post-Graduate Hospital. By Charles B. Kelsey, M. D., New York City.

Treatment of the Opium Neurosis. By Stephen Lett, M. D., Medical Superintendent of the Homewood Retreat, Guelph, Ont., Canada.

A Study of the Degenerative and Destructive Diseases of the Lungs among the Insane. By H. A. Tomlinson, M. D., St. Peter, Minn.

A Case of Probable Meningeal Hæmorrhage With Symptoms Resembling General Paresis. By George J. Preston, M. D., Baltimore, Md.

A Case of Acute Delirium. With some Considerations on its Pathologic Aspects. By Thomas P. Prout, M. D., Morris Plains, N. J.

The Etiology, Pathology, and Treatment of Intestinal Fistula and Artificial Anus. By N. Senn, M. D., Ph. D., L. L. D., Chicago, Ill.

Ueber den Einfluss der Grosshirnrinde auf den Schluckact und die Athmung. Von Prof. W. v. Bechterew und Dr. P. v. Ostankow.

Report of a Case of Pathological Separation of the Lower Epiphysis of the Femur. By A. H. Meisenbach, M. D., St. Louis, Mo.

Ueber die Bedeutung des gleichzeitigen Gebrauchs der Bromide und der Adonis vernalis bei Epilepsie. Von Prof. W. v. Bechterew.

Some Medico-Legal Features of the Schneider Case. By Irving C. Rosse, A. M., M. D., F. R. G. S., Washington, D. C.

Tumor of the Cerebellum With Bulimia and Recurrent Apoplectiform Seizures. By J. T. Eskridge, M. D., Denver, Col.

Zur Frage über den Einfluss der Hirnrinde und der Sehhugel auf die Schluckbewegungen. Von Prof. W. v. Bechterew.

Die sensiblen Bahnen im Rückenmark. Nach den Untersuchungen von Dr. F. Holzinger. Von Prof. W. v. Bechterew.

Dislocation and Double Fracture of the Upper Third of the Humerus. By B. Merrill Ricketts, M. D., Cincinnati, Ohio.

A Contribution to the Study of Water-borne Cholera. By George Homan, M. D., Health Commissioner, St. Louis, Mo.

A Report of Thirteen Cases of Ataxia in Adults with Hereditary History. By Irwin H. Neff, M. D., Kalamazoo, Mich.

Analysis of the Cases Operated with Murphy Button up to date. By John B. Murphy, A. M., M. D., Chicago.

The Medico-Legal Aspects of Paranoia with Report of a Case. By John Punton, M. D., Kansas City, Mo.

Die Bedeutung der Frenkel'schen Methode bei der Behandlung von Tabes dorsalis. Von Prof. W. v. Bechterew.

The Value of Gude's Pepto-Mangan in the Treatment of Anæmia. By Hugo Summa, A. M., M. D., St. Louis.

Der Menstruationszustand und die Menstruationspsychosen. Von Prof. P. J. Kowalewski, Charkow, Russia.

Die functionellen Nervenkrankheiten und die Syphilis. Von Prof. Dr. Paul Kowalewsky, Charkow, Russia.

Is the Physiognomy of the Fundus Oculi in Epilepsy Characteristic? Wendell Queber, M. D. Pottsville, Pa.

Clinical Notes on the Diagnosis and Treatment of Apoplexy. By George J. Preston, M. D., Baltimore, Md.

A Contribution to the Study of Syphilis of the Nervous System. By Dr. Ralph L. Parsons, Sing Sing, N. Y.

Castration for the Cure of Hypertrophied Prostate. By J. William White, M. D., Philadelphia, Pa.

Anterior Poliomyelitis. By De Forest Willard, M. D., and Guy Hinsdale, M. D., Philadelphia, Pa.

Detention Wards for Cases of Suspected Insanity. By George J. Preston, M. D., Baltimore, Md.

The Sociological Status of Medical Practice. By Theodore W. Schaefer, M. D., Kansas City, Mo.

A Valuable Discovery. The Cure of Impotency. By Hugo Engel, A. M., M. D., Philadelphia, Pa.

Ripening of Immature Cataract by Direct Trituration. By Boerne Bettman, M. D., Chicago, Ill.

Die Hypnose und ihre Bedeutung als Heilmittel. Von Prof. W. v. Bechterew in St. Petersburg.

Report of a Case of Pulmonary Tuberculosis. By C. H. Powell, A. M., M. D., St. Louis, Mo.

Brief Studies in Tuberculosis among the Insane. By E. D. Bondurant, M. D., Tuscaloosa, Ala.

Some Mental Disorders of Childhood and Youth. By Henry M. Hurd, M. D., Baltimore, Md.

The Treatment of Empyema of the Antrum of Highmore. Robert Levy, M. D., Denver, Colo.

Operative Treatment of Myofibroma Uteri. By N. Senn, M. D., Ph. D., L. L. D., Chicago, Ill.

The Mirror Test for Nasal Obstruction. By Hanau W. Loeb, A. M., M. D., St. Louis, Mo.

Drainage and Irrigation of the Maxillary Antrum. By Robert Levy, M. D., Denver, Colo.

Subvolution—A New Pterygium Operation. By Boerne Bettman, M. D., Chicago, Ill.

Early Diagnosis of Cancer of the Uterus. By Edwin Ricketts, M. D., Cincinnati, Ohio.

Some Observations on Paresis in the Negro. By P. T. Vaughan, M. D., Tuscaloosa, Ala.

A Review of Six Interesting Pathologic Cases. By E. R. Axtell, M. D., Denver, Col.

Colotomy and the Kraske Operation. By B. Merrill Ricketts, M. D., Cincinnati, O.

Report of a Case of Acromegaly. By Ralph L. Parsons, M. D., Sing Sing, N. Y.

Eleventh Annual Report of the Society of the St. Louis Training School for Nurses.

Ueber pupillenverengernde Fasern. Von Prof. W. v. Bechterew. St. Petersburg.

The Duty of the State to the Insane by Dr. Andrew Macfarlane, Albany, New York.

Anto-toxarmia in Drug Habits. William F. Waugh, A. M., M. D., Chicago.

Chloroform in Labor. By Edwin Ricketts, M. D., Cincinnati, Ohio.

Direct Fixation in Fractures. By B. Merrill Ricketts, M. D., Cincinnati, O.

Hysterical Pyrexia. By George J. Preston, M. D., Baltimore, Md.

Free Medical Education. By Robert Levy, M. D., Denver, Colo.

Cerebral Oedema. By George J. Preston, M. D., Baltimore, Md.

Akinesia algera. Von Prof. W. v. Bechterew.

THE
ALIENIST AND NEUROLOGIST

VOL. XVI.

ST. LOUIS, JULY, 1895.

No. 3.

ORIGINAL CONTRIBUTIONS.

WAS CARLYLE INSANE?

A Study of Race Egotism.*

By JAS. G. KIERNAN, M. D., Chicago.

Fellow of the Chicago Academy of Medicine; Professor of Nervous and Mental Diseases,
Milwaukee Medical College; Professor of Forensic
Psychiatry, Kent Law School.

WHEN the issue of insanity is raised, the alienist must determine whether the disaccord of the subject's actions with his birth, education and circumstances, be such as to constitute disease. The common tendency to measure in non-criminal matters, sanity by the measurer's self must be remembered. Intolerance once flaming into religious persecution, now smudges in the contemptuous term crank, when seeming departure occurs from philistine standards. Carlyle could not justly complain of such usage, for, as Kate Sanborn† states:

"He regarded most contemporaries as lunatics, fools, or bores, and was so odd, unreasonable, cross and pessimistic—a combination, as Dr. John Lord put it, of Diogenes, Jeremiah and Dr. Johnson—that to impartial observers he appears a little 'off.' "

*Read before the Chicago Academy of Medicine April 12th, 1895.

†Vanity and Insanity of Genius.

Politicians who regard men of earnest purpose as cranks, consider Carlyle insane. Thus did a practical exponent (who combined literature with boodle getting) of the Carlylean political gospel voiced by Tennyson demand for:

"A man with head, heart, hand,
One still strong man in a blatant land."

The European Tweed, Napoleon III, a coeval representative of Caesarism, whom Carlyle illogically despised and decried, spent an evening in Cheyne Row. Carlyle had been pragmatically eloquent. Napoleon asked when he left "if that man was mad?"* According to Sully:†

"Carlyle compels an attentive reader to propound to himself anew the long standing puzzle: 'Is genius something wholly normal and sane?' For there is surely a suggestion of temporary mental unsoundness in the idea of that lonely wanderer through the crowded streets of London suddenly seeing in the figures he met so many spectres and feeling himself to be but another ghastly phantom haunted by demons. And if all anger is a sort of madness, it is but natural that one should see something of a momentary mania in those terrible outbursts, of a spirit of revolt against all things, which time and again made desolate the Chelsea home, and wrung from the sage's wife the humiliating confession that she felt as if she were keeper of a mad-house."

The picture vividly suggests insanity, yet no given circumstance or congerie of circumstances can scientifically be *per se* positive proof of either sanity or insanity. As Froude, the ideal biographer remarks:

"Since Carlyle's writings have exerted such influence in the literary world, it has a right to know what manner of a man he was. Claiming to speak with authority denouncing as empty illusions modern ideals, concealment is not permissible. Carlyle lived a long life unblemished by grave moral defects. Never deviating from strictest integrity within sight of starvation, he would do only his best. He never wrote an idle word, nor uttered a sentence which he did not believe. Conscious that he had talents above common men, Carlyle sought neither rank nor fortune. When famous and accepted as an equal among the great he was content with the wages of an artisan and kept to

* Froude "Life of Carlyle."

† *Popular Science Monthly* 1884.

the simple habits in which he had been bred in his father's house. He might have had a pension had he stooped to ask for it, but when offered, it was declined. He despised luxury, ever severe in the economy of his own household, but, even in great poverty, had something to spare for those who were dear to him. When money came in his old age he was lavishly generous. Affectionate, he was beyond all men. His faults, in remorse, exaggerated, as noble natures are apt to do, his impatience, irritability and melancholy, which made him at times distressing, were the results of temperament, of a peculiarly sensitive organization, of absorption in his work and determination to do work well. Such faults are but vapors which hang about a mountain, inseparable from man's nature, without them, his character cannot be understood as it affected others. They do not blemish nor when fully known will he be admired less. Carlyle had not the imperious grandeur superior to weakness which reigns impassive in distant majesty. The fire in his soul burned red to the end, sparks flew from it hot on those about him, not always pleasant, not hitting the right spot, or the right person. But it was pure fire of noble passion, love for the good and indignation at the base. His life was not a happy one. There were features in it for which he bitterly reproached himself. Perhaps most men sin deeper without knowing that they have anything of which to repent. The more completely his character is understood, the better it will correspond to his intellectual teaching. There was no falsehood or conceit in him. The same true nature showed itself in his life and in his works. He acted as he spoke from his heart and those who have admired his writings will equally admire himself when they see him in his actual likeness."

Froude has been reproached with surcharging Carlyle's portrait too deeply with shade yet this picture is that of a man with all his infirmities, intellectually and morally above the mass, it contrasts with Green's* peasant Lowland Scotch picture.

The peasants scattered thinly over vale and hillside winning a scant subsistence from a thankless soil were too few and too poor to be a political force. They were of necessity dependent on their lords and during the centuries of feudal anarchy which followed the war of the independence, the strife of lord against lord made their life, a mere struggle for existence. To know neither rest nor safety, to face

* History Vol. II.

danger every hour, to plow the field with arms piled carefully beside the furrow, to watch every figure that crossed the hillside in doubt whether it were for foe or friend, to be roused from sleep by slogan of the highlander or war cry of the borderer as they swept sheep and kye from every homestead in the valley, to bear hunger, thirst, cold and nakedness, to cower within the peel tower or lurk in the moorland while barn and byre went up in pitiless flames, to mount and ride at his lord's call on forays as pitiless, this was the rough school in which the Scotch peasants was trained through hundreds of years. But it was a school in which he learned much. Suffering that would have degraded a meaner race into slaves only hardened and ennobled the temper of the Scotchman. From these ages of oppression and lawlessness, he drew the rugged fidelity, the dogged endurance, the shrewdness, the caution, the waryness, the rigid thrift, the noble self dependence, the patience, the daring which have distinguished him ever since.

- * If this standard of Green be accepted as a type the problem as to Carlyle's sanity is settled. He is so decidedly out of accord with his environment that he must be deemed insane. Green draws an ideal with much truth but with much unconscious omission of shade. Sir Walter Scott does not blacken Scotland in his picture of Scotch semi-barbaric life, yet this is but a replica of the picture of Irish life, decades previous of Froude's "Two Chiefs of Dunboy." The tendency to right wrongs by the strong hand, the fierce resistance to excise tax and duties are apparent in both. That, as Macaulay* remarks, "the Scotch are a people eminently intelligent, wary, resolute and self possessed, is obvious to the most superficial observation. That they are a people, peculiarly liable to dangerous fits of passion and delusions of the imagination, is less generally acknowledged, but is not less true."

The history of Scotland resembles that of Carlyle's "Kings of Norway," a warfare, in which, a man's foes were those of his own household. A contentiousness now smoking in ecclesiastical squabbles with the result that: I ken naeboddy orthodox but ma brither Jock, and I hae ma doots about jock. That this contentiousness may produce:

* History, Vol. V.

“The stern joy which foemen feel,
In foemen worthy of their steel,”

is undeniable, but aided by adulation, it creates the philistine of whom there is none more unlovely than the dour Scot with his egotistic unsocial pride, the illogical intensity which appears in the Scotch elder, who, reproving the servant girl for a Sabbath walk with her admirer in the fields, met by the retort that Christ had also walked in the fields, replied unembarrassed: “I think nae better o’him for that.”

The egotism rebound of individualism makes such a man his brother’s keeper in a most offensive prying fashion. At the least, he becomes an oracular infallibility on faith and morals. With this last stamp of men, Scotland has been numerously cursed.

The Carlyles had the virtues of the Lowland Scotch, with all their defects. Carlyle’s grandfather was a fiery, irascible, indomitable man, poor, proud and discontented, full of irregularities with a taste for what his sternly puritanical son called frivolous literature. With his brother he was on distant terms, which Nisbet* regards as evidence of insane temperament, if not an outcome of insane tendencies. The quarrel was natural under the circumstances in Lowland Scotch and Northumbrian families. The Carlyles, as Froude admits, were emphatically borderers. The granduncle had been apprenticed to a shoemaker. He ran wild, gambled, fell into discredit, ran off to sea. Despite this quarrel, despite the unwillingness and feebleness produced by years, the sailor ran no little risk of life in order to see a brother rather neglectful about family ties. The grandfather left his children largely to their own resources during life. James Carlyle had to support himself and aid in the support of the family. He picked up a desultory Calvinistic education from a dipsomaniacal school teacher who, during his lucid intervals, had the sternest possible ideals. Warring as these did against the innate tendencies of the Carlyle nature, they enforced on James Carlyle such repression of the emotions that his heart seemed walled in, even to the

* Insanity of Genius.

wife over whose insanity he burst into passionate torrents of grief, demonstrating that:

"The shallow murmur but the deep are dumb."

His emotions were restrained by covenanting modification of the Horatian principle:

"Not to admire is all the art I know,
To make them happy and to keep them so."

His need of restraint was intensified by his white-hot passionate nature quickly bursting into scorching, sardonic humor. He learned the trade of stone mason and prospered in life, being a man of stern integrity. Very undemonstrative of affection, he kept careful watch over his children's tendencies. He was able to tell when Thomas Carlyle's home education needed supplementing by village school, by grammar school, by University. He held his own in discussions with the gentry, while retaining their respect, sternly rigid, yet kindly, undemonstrative, fearing his own tendencies to anger, he restrained the first emotional step. His reception of Jane Walsh evinced delicate high breeding. When she appeared James Carlyle was in his rough farm dress at work. He was called, the rest of the family kissed her. The old man, to her surprise, drew back and soon left the room. He soon returned shaved, washed and in Sunday dress. Now, he said, if Miss Walsh allows it, I am in a condition to kiss her too. James Carlyle's clear courteous insight was shown when Thomas Carlyle proposed to bring his wife to live with his parents. His father made Thomas sensible of the unfitness of his household to receive a lady brought up as Miss Walsh had been. James Carlyle was clearer headed than John Shakespere. The latter became bankrupt because of the changes in the glove trade. The former easily foresaw that a conscientious stone mason of moderate capital could not compete with jerry-building contractors, and retired to the farm. Like many pietistic Scotch, James Carlyle had low opinions of poetry because of its seemingly immoral tendencies. Although he had met Burns, he did not, as his son admits, see any cause for gratulation therein. Among strict Presbyterians there was a sense of the enormity resultant on poetry which the drunken Scotch

libertine expressed to the poetical clergyman reforming him: "I drink, I rin wud wi' the lasses but I dinna sing any profane sangs." James Carlyle and his brothers were undemonstrative but brotherly affectionate. They all prospered. Noted for their hard sayings and in their early manhood for "hard strikings," they were warmly liked by the helpless. But by others they were regarded as a personification of the Border war song:

"My name it is little Jock Eliot,
And whae dare meddle wi' me."

Carlyle's mother was a loving pious women with the slyly humorous way of viewing things common to Lowland Scotch women. She was the second wife. Carlyle was born in 1795. In 1817 she was attacked by protracted fever, probably typhoid; after the subsidence of the acute symptoms, she became delirious and then insane, requiring hospital care for a few weeks. A step, Froude remarks, no doubt just and necessary, which she never wholly forgave, but resented in her own humorous way to the end of her life. The disorder soon passed off, and never returned. Unrecovered patients often entertain unjust suspicion of the insane hospital where they are treated. Complaints of this kind are at the present time good ground for suspecting the mental state of the complainant. To-day in acute confusional insanity after typhoid fever, alienists would hesitate over the propriety of early removal. Mrs. Carlyle's humorous resentment was not demonstrative evidence of unrecovered insanity. This attack of insanity had no necessary bearing on Carlyle's heredity, since it occurred after his birth, and was of a type which might attack, at the proper ætiological moment, the normal. Carlyle was brought up in the rustic Scotch fashion. The life of the children was not a joyful one. They were taciturn rather than talkative. As a child, Thomas Carlyle was quick-tempered, passionate so intolerably sensitive to trifles that his mother found him "ill gey to live wi'." His temper, regarded as a hereditary trait, was accepted with most injurious tolerance. Jane Walsh Carlyle wrote forcibly in response to Margaret Carlyle's anxiety anent a hypochondriac state:

* Lite of Carlyle

It is quite true that he is done with that illness and might have been done with it much sooner if he had treated himself with ordinary sense. I am surprised that so good and sensible a woman as yourself should have brought up her son so badly that he should not know what patience and self denial mean—merely observing. "Thou'st ill gey to deal wi."*

He had congenital lithæmic tendencies certainly not improved by such training. He gained an undue hypochondriac value of his pathologic importance. In puberty he manifested neurasthenia charged to gastro-hepatic disturbances clearly expressions of nerve overstrain, which never wholly left him. The resultant irritability found vent in pithy Scotisms. When in pain, the common calamities of life became unbearable horrors. Reticence about personal sufferings was unthinkable. Minor ailments, his imagination personified like the temptations of a Saint. In great things he was most generous, in trifles intolerably irritable. When indisposed, he frightened all his friends as to his health. At the grammar school he sent his family a report indicating that he was seriously ill, which was cruelly unnecessary. The attack soon passed off. Of much later time, Froude remarks, a spectre moving in a world of spectres, one mass of burning sulphur are his images of his condition. If his little finger ached, no mortal ever suffered so before. If his liver was amiss, he was a chained Prometheus, with the vulture at his breast. Earth, ether, sea and sky were invoked to witness his injuries. When the notion was on, he could not, would not restrain himself. Carlyle considered these hypochondriac tendencies evidence of greatness. He remarks anent Cromwell in "Heroes and Hero Worship:"

"But the mournful over-sensitive hypochondriac humor (the hypochondria being due to malaria) of Oliver in his youthful years is indisputably known. The Huntington physician had often been sent for at midnight. Mr. Cromwell was full of hypochondria, thought himself near dying and had fancies about the town cross. These things are significant, such an excitable deep feeling nature in that rugged stubborn strength of his is not the symptom of falsehood, it is the symptom and promise of quiet other than falsehood. All great men have these."

* Froude's *Life of Carlisle*.

Such egotism is rather frequent among Lowland Scotch. McCosh of Princeton once remarked "the problem of evil is a great one. Aristotle could not solve it, Augustin could not, Calvin could not, even I myself have been bothered."

Carlyle suffered occasionally perhaps from injudicious treatment. "A long hairy-eared jackass," as he called some Edinburg tobaccophobiæ, ordered him to give up tobacco which resulted only in increased agitation. As tobacco was alleged to be the sole cause of the symptoms this ætiology gave Carlyle an agreeable hypochondriac reason for railing at the medical profession. From Mrs. Carlyle's letters it is certain that the "Sage of Chelsea" was anything but sage in his use of tobacco.

Carlyle was taught reading, he could not remember when, by his mother. Later his father taught him arithmetic. At five he was sent to the village school where he made such progress in figures and Latin, that his father determined to send him to a grammar school and ultimately to the university with a view to the ministry. He was a shy retiring boy shrinking from rough companions but with the hot temper of his race. His mother made him promise that he would never return a blow. The swan of the family, his brothers were permitted to fight his battles. This made the school the inferno he has depicted in "*Sartor Resartus*." In irritation, he once kicked his biggest bully whereupon a pitched battle followed, in which Carlyle, beaten, taught his adversary a severe lesson. He was no longer persecuted. His bitter school impressions, on him, as on Shelley, stamped a mental bias. Shelley looked on authority as pernicious. Carlyle's promise to his mother made him a martyr with a martyr's self esteem which increased his tendency to egotistic epigrammatic oracular utterances.

Nervous strain, inevitable under the circumstances, laid the foundation of the neurasthenia which, developing during puberty, assumed a gastric type and constituted the so-called dyspepsia of after-life.

At the grammar school he learned French, Latin, some Greek and mathematics, the latter chiefly because he loved his mathematical teacher. His father sent him to Edinburg

University where a mathematical bent was the only noticeable evidence of scholarship chiefly due to attention received from the professor. Carlyle's friends at Edinburg were peasants among whom he held the first place which formed a larger part of their attraction to him. In many respects the intercourse was of value. The boys wrote on Scott's last novel or Byron's poem, on the "Edinburg Review," on the war, on the fall of Napoleon, on lectures and innocent trifles with bright humorous sketches. They looked to Carlyle to advise them: he was prudent, able if money matters went wrong to help them out of his humble savings. He was noticed for effective speech "far too sarcastic for so young a man." He seems to have been Swiftian in style. He was often addressed as Jonathan or Dean or Doctor. That Swift exercised an enormous influence on Carlyle must be evident to any one who has followed the evolution of the clothes hypothesis from the "Tale of a Tub," to its finished state in "Sartor Resartus." On it, as Garnett* remarks, Goethe exerted philosophic influence of the type of the earth spirit in Faust:

"The humming loom of time I ply,
To weave the robe thou seest God by."

The influence of Fichte is also demonstrable. Carlyle's critical analytic excathedra spirit was evident in the remark "knowing how you abhor all affectation" used to him when still a boy. Early set upon a pedestal, the racial and family tendency to pragmatic utterance was enormously increased. Carlyle, the dictator of the university, very naturally evolved into the Carlyle of later years. His letters at this time were "scurrilous, blackguarding, flattering, vexing, penicked, humorous, witty and daft."

On graduation Carlyle accepted a mathematical tutorship at the grammar school where he was educated. He succeeded Irving at Kirkcaldy school but was not popular. Shy yet sarcastically self asserting, he could neither accommodate himself to a Scotch provincial drawing room nor to his work. Froude† admits that, from his irritable nervous

* Life of Carlyle.

† Froude's Life of Carlyle.

system and impatient temperament, Carlyle's egotism was increased by school-mastering, and that he was not happily occupied in teaching stupid lads the elements of Latin and arithmetic. Nor were matters mended when the pompous town corporation undertook to instruct him.

Here he met Miss Gordon the Blumine of "Sartor Resartus." The acquaintanceship was broken off through the common sense of an aunt ere any engagement although deep affection had clearly flowered, in Miss Gordon, who, in her farewell letter, evinces clear insight into Carlyle's character.*

"And now my dear friend, a long, long adieu, one advice, and as a parting one, consider value it. Cultivate the milder disposition of your heart. Subdue the more extravagant visions of the brain. In time your abilities must be known. Among your acquaintances they are already beheld with wonder and delight. By those whose opinion will be valuable they hereafter will be appreciated. Genius will render you great. May virtue render you beloved. Remove the awful distance between you and ordinary men by kind and gentle manners. Deal gently with their inferiority and be convinced they will respect you as much and like you more. Why conceal the real goodness that flows in your heart?"

There was a changeability about Carlyle's attempts to determine his future career, that, from the Lombroso† standpoint, would constitute variability evidence of insanity. Like most favorite sons of pious Presbyterian mothers he had been destined for the kirk. At the age of twenty-three he announced his abandonment of this career. His school-mastering had become intolerable. He was not sufficiently obsequious to Kirckaldy little great men of Bounderby type. Attempting to study law, its trickery he finds unendurable because of its logical evolutionary tendency.

"Broadening down from precedent to precedent," is still more objectionable. Under his mathematical bias, he attempts in an inchoate way, civil engineering, but abandons this. He finally abandons school-mastering under the influence of Edward Irving, a most decided paranoiac with philistine tendencies which had rendered him a brute to most of his scholars. Irving, at the time, had the para-

* Froude's *Life of Carlyle*.

† *The Man of Genius*, Contemporary Science Series.

noiaic mysticism which, later, during the period of transformation, developed into the "unknown tongues" and the Irvingitis.

There were reasons for these changes which do Carlyle honor. His doubts and his honesty prevented his acceptance of a parsonship. His dislike for trickery and mental bias against precedent unfitted him for law. The philistinism of school officials naturally made contact with the most canting cads imaginable, hateful to one who had had a positive cantophobia.

He finally adopted the career of a man of letters. Jeffrey, who, as Froude admits, judged rightly, insisted that literature was not suited to Carlyle's disposition. As Froude says:

In all active life, man works at the side of others. He has to consider them as well as himself. He has to check his impatience and to listen to objections even when he knows that he is right. He must be content to give and take, to be indifferent to trifles, to know and feel at all times that he is but one among many who all have their humors. Every day, every hour teaches him the necessity of self restraint.

The man of letters has no such wholesome check upon himself. He lives alone, thinks alone, works alone. He must listen to his own mind for no other mind can help him. He requires correction as others do but he must be his own schoolmaster. His peculiarities are part of his originality and may not be eradicated. The friends among whom he lives are not the partners of his employment; they share in it, if they share at all, only as instruments or dependants. Thus he is an autocrat in his own circle, and exposed to all the temptations which beset autocracy. He is subject to no will, no law, no authority outside himself; and the finest natures suffer something from such unbounded independence—Carlyle had been made by nature sufficiently despotic and needed no impulse in that direction from the character of his occupation, while his very virtues helped to blind him, when it would have been better, if he could have been more on his guard. He knew that his general aim in life was pure and unselfish, and that in the use of his time and talents he had nothing to fear from the sternest examination of his stewardship. His conscience was clear. His life from his earliest years had been without a taint of selfish ambition. He had stood upright in many trials. He had become undisputed intellectual sovereign over

a large selection of his contemporaries, who looked to him as disciples to a master, whose word was law to their belief. And thus habit, temperament, success combined to deprive him of the salutary admonition with which the wisest and best cannot entirely dispense. From first to last, he was surrounded by people who allowed him his own way because they felt his superiority, who found it a privilege to minister as they became more and more conscious of his greatness, who, when their eyes were open to his defects, were content to put up with them as the mere accident of a nervously sensitive organization.

For continuous sincerity, Froude eulogizes Carlyle who, in his "Heroes and Hero Worship," explicitly repudiates it. Anent Mahomet Carlyle asks "who is continuously sincere."

He narrates the Gordon episode in a decidedly shuffling tone with the gusto for feminine adulation which later rendered Jane Welsh Carlyle unhappy since to the adulator much unladylike treatment of his wife was forgiven. Carlyle's opinion was a vehement expression of the platitudes of those around him. He was the dour Scot of the type; "God bless me and my wife, my son John and his wife, us four and no more." Carlyle shut Jane Welsh Carlyle out of his benediction. More obtrusively demonstrative of affection than his father he was far less tender. The father and mother exhibited delicacy toward their daughter-in-law of which he was incapable. Carlyle always speaks charitably of his kinsfolk but what seems to him a virtue in them, he looks upon as a fault in others. Mrs. Carlyle in a letter mentions a melody as dying away into an unintelligible whinner, Carlyle explains that the phrase was used by his father anent a precentor who having lost his tune, desperately tried several others. Later on in the same volume the phrase occurs again. Carlyle does not remember his father's connection with it and his explanation is "some fool's speech to me I forgot whose."

Relationship with Irving stimulated the Lowland Scotch mysticism, which Calvinism overlies, as also did Carlyle's German studies so that it simulated hallucinatory phenomena.

These naturally occur in a mystic Lowland Scotchman so steeped in such Fichtean dualistic metaphysics as to accept the not-me as a co-existing product of the me. To

this view Carlyle gives repeated literary expression noticeably in "Sartor Resartus." In private life, as Mrs. Carlyle suspected, posing for a biographer, he designates the result spectral phenomena. The spectral phenomena often appeared at Carlyle's periods of depression but are metaphysically shadowy. Even that strongly emphasized by Sully, occurred under circumstances which might well produce, in a normal metaphysician, the state which appears as normal thought in "Sartor Resartus." The MSS. of the finished "French Revolution" had been sent to Mill when suddenly one day, Mill, intensely agitated, informed Carlyle that the MSS. had been burnt. His desire to reassure Mill prevented Carlyle from realizing fully his loss. During the strain of rewriting he is haunted by doubt of his power to rewrite, of his style, of success of the work. At the same time he is troubled by pecuniary distress. Under these circumstances, he attends a social gathering and hears Sydney Smith witticizing. The ghastly tragedy of the Revolution, into which he is plunged, and his own distress so contrasts with the hollowness of social functions, that the "world looks often quite spectral sometimes, quite hideous discordant, almost infernal."

Concerning a period of depression Carlyle* remarks:

"I have a strange dreamy dawning life at present in general not a little relieved and quieted yet with all the old features of Burton's† melancholic man; to-day full of peaceable joy (ah no, not peaceable entirely, there is a black look through it still) then to-morrow for no assignable cause, sunk into sadness and despondency. But verily the book has done me great good. It was like a load of fire burning up my heart, which by heaven's favor I have got thrown out of me. Nay even in my blackest despondencies when utter obstruction and extinction seem to threaten me I say: Well it shall take my life but my quiescence it shall spare." A few days later he remarks: Blessed be God there is a kind of light-gleam in the inner man of me which who so will quickly, humbly, silently follow, it shall be well with him. Silently above all. Why therefore do I now speak. I endeavor to thank Heaven for much mercy to me on this

* Reminiscences.

† Anatomy of Melancholy.

side also. Yes these long years of martyrdom and misery which I would not suffer again to buy the world were not utterly in vain. My mood of mind at present is not nearly so wretched. I am wae, very wae and sad but entirely peaceable and such sadness seems almost as good as joy."

That this resembles neurasthenic incipient melancholia is undeniable. With less oracular egotism and less posing it would be merely a fit of the blues. Even under favoring circumstances in Carlyle it went no further. Under stimulus of needed exertion he, unlike Johnson, could overcome it. Johnson's depression and abulic tendencies to languor were deep. Carlyle's were superficial. Had he, as Mrs. Carlyle hints, possessed his soul in patience by obeying his own teachings the spectral tendencies would have disappeared.

The exuberant reactionary period following depression was that of circular neurasthenia:

"His talk was intensely interesting, intensely entertaining. No one who heard him flowing on, could have guessed at the sadness which weighed upon him when alone. Those bursts of humor, flashing out amidst his wild flights of rhetoric, spoke of anything but sadness. Even the servants at places where he dined had to run out of the room choking down with laughter."

The first evening at Cheyne Row delighted Margaret Fuller. Carlyle was in a very sweet humor full of wit and pathos without being overbearing and oppressive. She was carried away with a rich flow of his discourse and the hearty noble earnestness of his personal being brought back the charm which was once in his writings before she wearied of it. She admired his Scotch dialect, his way of singing his great full sentences so that each one was like the stanza of a narrative ballad. He talked of the present state of things in England, giving high witty sketches of the men of the day, some sweet homely stories he told of things he had known among the Scotch peasantry. There was never anything so witty as his description. It was enough to kill one with laughter. Nor was he ashamed to laugh himself, when he was amused, he went on in a cordial human fashion.

On a second visit the humor was less sweet, though more brilliant, Miss Fuller was obliged to disagree with

everything. The worst of hearing Carlyle (she says) is that you cannot interrupt him.

"I understand the habit and power of haranguing have increased very much upon him, so that you are a perfect prisoner when he has once got hold of you. To interrupt him is a physical impossibility. If you get a chance to remonstrate for a moment, he raises his voice and bears you down. True he does you no injustice, and with his admirable penetration, sees the disclaimer in your mind so that you are not morally delinquent but it is not pleasant to be unable to utter it."

These mental phenomena so notoriously occur in lithæmia that old clinicians chronicle them as expressions of suppressed gout. As Froude remarks:

Friends could be amused by peculiarities from which they do not personally suffer. But, for those who actually lived with him—for his wife especially, on whom the fire sparks fell first, and always, and, who could not always escape from him, that trial was hard.

Carlyle's marriage was on his part, the expression of a need of a meek Griselda, of a sense of his wife's insight, culture and appreciation. On her's it was ambition coupled with esteem and despair. In station she was far above Carlyle, at a time when the distance between the Scotch peasant woman and cultured lady was, as Burns remarked, enormous. Burns had a fair conception of cultured men but the cultured Scottish lady awed him into reverence. Jane Welsh, to the last, was the most queenly of a queenly type. She was the daughter of a cultured physician of good family who fell martyr to professional duty during a typhus epidemic. She had black hair, large black eyes shining with soft mockery, pale complexion, broad forehead, nose not regularly formed, but mocking like the eye, figure, slight, airy and perfectly graceful. She was called beautiful, beautiful, Froude remarks, she remained to the end of her life, if a face be beautiful which to look at is to admire. But beauty was only the second thought which her appearance suggested, the first was intellectual vivacity.

Precious as she was to parents who had no other child, she was brought up with exceptional care. Strict obedience in essentials was the rule of her parents. There was how-

ever no harsh interference with her natural playfulness.* She was a collected little lady with a fine readiness in difficulties: The Welshes, the leading family at Haddington, were prominent in the social entertainments there. There was to be a child's ball at the dancing school, the higher public, especially the mothers and fathers, collected to see the children dance: Jennie Welsh then about six, selected to perform some *pas-seul*, beautiful and difficult, the jewel of the evening and was privately anxious in her little heart to do it well. She was dressed to perfection, with elegance, with simplicity, and at the due hour was carried over in a clothes-basket (streets being muddy and no carriage) and landed safe, pretty silks and pumps uninjured. Through the ball everything went well and smoothly, nothing to be noted till the *pas-seul* came. The little woman stood waiting for the music. Music began but alas it was the wrong music. Impossible to dance that *pas-seul* to it. She shook her little head, looked or made some sign of distress, music ceased, took counsel, scraped, began again; again wrong hopelessly the *pas-seul* flatly impossible. Beautiful little Jane, alone against the world, forsaken by the music, but not by her presence of mind, plucked up her little skirt flung it over her head and curtseying in that veiled manner withdrew from the adventure amidst general applause.

Masculinity in women is certainly evidence of degenerative taint, but Jane Welsh's tendencies in this respect in America would be regarded as anything but excessively masculine. Even Lombroso,† so prone to generalize from Continental European standards of femininity, remarks:

That masculine qualities are not always found in criminals alone, is proven by the instance of Mrs. Carlyle, certainly the purest and most angelic of women, who, yet as a child, climbed walls and gates and loved to box with her schoolboy companions from whom she got usually less than she gave.

She learned rapidly the usual young lady accomplishments:‡ music, drawing, modern languages. She had an appetite for knowledge not easily to be satisfied. A girl's education was not enough. She demanded to learn Latin like a boy. Her mother was against it. Her father, who thought well of her talent, inclined to let her have her way. The

* "Carlyle's Reminiscences."

† The Female Offender.

‡ Carlyle's Reminiscences.

question was settled at last in a characteristic fashion by herself. She induced a lad in Haddington, to introduce her to the mysteries of nouns of the first declension. Having mastered her lesson, one night, when she was thought to be in bed, she had hid herself under the drawing room table. When an opportunity offered, a small voice was heard from below the cover: "Penna, a pen; pennæ of a pen," etc., etc. She crept out amidst the general amusement, ran to her father and said: "I want to learn Latin; please let me be a boy." Soon after this there was a change in the school management, Edward Irving, as master, was trusted with the private education of Jane Welsh. Dr. Welsh who recognized his fine qualities took him into his household, where he was treated* as an elder son. He watched over the little lady's studies and taught her astronomy on bright nights. Irving was a young man and his pupil was a child. She worked with feverish eagerness getting up at five in the morning and busy with her books at all hours. She was soon *dux* in mathematics. Her tutor introduced her to Virgil. Virgil and Latin studies made her a sort of Pagan. Not religion alone did these studies influence but the whole being was tinged with them.

"Would I prevent myself," she remarks, "from doing a selfish or cowardly thing, I didn't say to myself: you mustn't or if you do you will go to hell hereafter. Nor yet if you do, you will be whipped here, but I said to myself simply and grandly: A Roman would not have done it, and that sufficed under ordinary temptations. Again when I did something heroic, when for instance, I had caught a gander, which hissed at me, by the neck, and flung him to the right about, it was not a good child that I thought myself for whom the half crown bestowed on me was reward—in my own mind I had deserved well of the Republic and aspired to a 'civic crown.' But the classical world in which I lived and moved was best indicated in the tragedy of my doll. It had been intimated to me by one whose wishes were law, that a young lady in Virgil should for consistency's sake drop her doll. So the doll being judged, must be ended, I doing what I would with my own, quickly decided how. She could end as Dido ended that doll, as the doll of a

* Froude's Life of Carlyle.

young lady in Virgil should end. With her dresses which were many and sumptuous, her four-posted bed, a faggot or two of cedar allumetts, a few sticks of cinnamon, a few cloves and a nutmeg, I constructed her funeral pyre. The new Dido having placed herself in the bed with help, spoke through my lips her last sad words. The doll having thus spoken, kindled the pile and stabbed herself with a penknife by way of Tyrian sword. Then however, in the moment of seeing my poor doll blaze up, for being stuffed with bran she took fire and was all over in no time—in that supreme moment my affection for her blazed up also and I shrieked and would have saved her but could not and went on shrieking till everybody within hearing flew to me and bore me off in a plunge of tears. An epitome of most of one's heroic sacrifices, it strikes me, magnanimously resolved on, ostentatiously gone about, repented of at the last moment and bewailed with an outcry. Thus was my inner world at that period three-fourths old Roman and one-fourth old Fairy."

When she was fourteen she wrote a rather inflated tragedy, extraordinary for her age. She never repeated the experiment, but for many years continued to write poetry. She had inherited from her mother the gift of verse making. Mrs. Welsh wrote soft, sweet, passionate, musical ditties. Her daughter had less sweetness but touched intellectual chords which her mother never reached.

The person whose suggestion occasioned the sacrifice of the doll was probably her father, of whom she always spoke with reverence. He was the only person who had any real influence over her. However wilful she might be, obedience to her parents unquestioning and absolute, lay at the foundation of her life. She used to say that this habit was her salvation and that she owed to it all that was of value in her character. She always spoke of any praise her father gave her as a precious possession. She loved him passionately and never spoke of him after his death except to friends whom she valued. It was the highest token of her regard when she was told anything about her father.

Dr. Welsh usually taciturn, especially about his bright daughter's gifts and merits, talked to her just ere his death in a style quite new, told her she was a good girl capable

of being useful and precious to the home circle she would live in; that she must summon her utmost judgement and seriousness to choose her path and be what he expected of her; that he did not think he had ever seen the life partner that would be worthy of her; in short, that he expected her to be wise as well as good looking and good—and all this in a tone and manner which filled her poor little heart with surprise and a kind of sacred joy, coming from the man she of all men revered.* Irving determined her fate. He had engaged himself while Jane Welsh was yet a child. In Scottish clergymen public opinion gave such an engagement the force of marriage. Until the engagement was ended by mutual consent, Miss Welsh refused to be on other than distant friendly terms. Knowing she had literary ambition, Irving introduced Carlyle as a competent advisor. The relations between them promised first merely a literary partnership. At the outset Miss Welsh gave Carlyle to understand gallantry was out of place. After Irving was lost to her, while giving Carlyle no encouragement, she was less cold. His admiration for her continued to increase and the relationship became warmer. It amused her to see the most remarkable person she had ever met at her feet and, woman-like, she behaved coquettishly. She finally consented to marry Carlyle whose idea of a wife was a steward-critic valet. Farm drudgery seemed to him so natural to a woman that he proposed it to this delicately natured queenly woman, while, like the hermit crab, he was to shut himself up in his Bohemian dreams. Reserving control of finances, he doled out cash in a brutally dictatorial fashion. She had to superintend expenditures, to watch household affairs and was received with bearlike growls for asking the necessary funds. Then came a serious financial crisis. Mrs. Carlyle not wishing to add to her husband's troubles had as far as possible kept her anxieties to herself. Indeed Carlyle, like most bourgeois husbands, was inclined to be irritable when spoken to about such matters. An explanation at least became necessary. Its pathetically sweet humorous acidity demonstrates that she had borne

* Carlyle's "Reminiscences."

much before she presented her financial statement. Defenses of unhappy wives, Nordau* claims a stigma of degeneracy of masochistic type in an author. The position of woman in the English common law, when free from statute and ecclesiastical trammels, sanctions such defenses strongly. Such an indictment against institutions whose individualism has stamped itself on the dominant English speaking race is impossible. This is not machochism nor sadism but the opposite. The masochistic theory in the Asiatic nations sank the race into degeneracy. Sex equality in evolution is an expression of advance not degeneracy. Recognition of defects implies exaction of strict responsibility in both sexes, and hence elevation in evolution. Where sex autocracy exists it results like all autocracy in degeneracy. Failure to recognize the just basis of complaints must exalt the primary *ego* at the expense of the secondary and thus lead to atavism.

Carlyle's snobbishness appears in the Ashburton episode. Froude admits this: Mrs. Carlyle's diary† expresses a decade of resentment at the intimacy, under happier circumstances a delight to herself, yet so ill-managed by all concerned that it steeped in gall her married life. Lady Ashburton could not but have been aware of this but for Mrs. Carlyle's own sake she ought to have behaved to her since Carlyle's lack of tact prevented him from seeing how unfit it was that Mrs. Carlyle should have to go and come at Lady Ashburton's bidding under fear of her husband's displeasure. In 1856 the Carlyles were going for a holiday to Scotland. Lady Ashburton who was going also had engaged a palatial carriage which had been made for the Queen and her suit and she proposed to take the Carlyles down with her. The carriage consisted of a spacious saloon to which communicating with it, an ordinary compartment with the usual six seats in it was attached. Lady Ashburton occupied the saloon alone. Mrs. Carlyle though in bad health and needing rest, was placed in the compartment with her husband, the family doctor and a servant, a position perfectly proper to her if she were a dependant but in which no lady would have been placed whom Lady Ashburton regarded as her own equal in rank. Carlyle ought not to have allowed it. It is not surprising to find that Mrs. Car-

* Degeneration.

† Froude's "Life of Carlyle."

lyle refused to return in the same way. "If there were any companionship in the matter," she said bitterly, when Carlyle communicated the proposal, "it would be different as then I should be going as part of your luggage without self-responsibility." Carlyle regarded the Ashburtons as great people to whom he was under obligations who had been very good to him; and of whose train he in a sense formed a part. Mrs. Carlyle with her proud independent Scotch republican spirit naturally would not recognize social distinctions, which in her case were absurd since her family was older, less bourgeois and more cultured than that of Lady Ashburton.

Mrs. Carlyle and Lady Harriet did not suit each other. Mrs. Carlyle did not shut her eyes to the noble lady's distinguished qualities which themselves might be an obstacle to intimacy. Mrs. Carlyle knew that she was far cleverer than the general run of female adorers who worshipped her husband. She knew that he was aware of her superiority, that by her talents as well as her character she had a hold upon him entirely her own, and that he only laughed good naturedly at the homage they paid him. But she could not feel as easy about Lady Harriet. She saw that Carlyle admired her brilliancy and was gratified by her esteem. Jealousy in the ordinary sense is extravagantly absurd. Still the position of a wife when her husband is an intimate friend of another woman is a difficult, delicate one. If there be confidence and affection between the ladies or if the friend have such perception of a wife's susceptibilities as to avoid wounding them or if the wife be indifferent and incapable of resentment, the relation may be delightful. If Lady Harriet Baring ever observed her discomfort she thought it too ridiculous to notice. She tried to be lofty, to be condescendingly kind to Mrs. Carlyle who for her husband's sake tried to like Lady Harriet. But it did not answer on either side. When two people do not agree it is a mistake to force them into intimacy. On the footing of neutral acquaintance they are more likely to grow into friends. Carlyle unfortunately could not see the distinction. To such a lady a certain homage seemed to be due and if his wife resisted he was angry. When Lady Harriet required her presence, Jane told John Carlyle that she was obliged to go or the Lady would quarrel with her and that meant a quarrel with her husband. To a proud woman like Mrs. Carlyle the sense that Lady Harriet could come in any way between herself and her husband was intolerable.

Carlyle was heedless in other respects. In a letter to him

when they had separated after what turned out to be for the last time she reprimanded him somewhat sharply for coming to her for a parting kiss with a cigar in his mouth. The financial grievance at last was gone but was not entirely forgotten. Carlyle's letters had failed to assure her of his affection for from the tone she thought at times that they must be written for his biographer. When he was at a distance from her, he was passionately anxious about her health. When he was at home, his own discomforts real or imaginary left no room for thought of others. "If Carlyle wakes once in a night," she said, "he will complain of it for a week. I wake thirty times every night but that is nothing." Notwithstanding all his resolutions and intended amendments for the future, things relapsed in Cheyne Row, after Carlyle returned from Germany, and settled again to his work, much to their old condition.

"The life was smooth, uneventful but the atmosphere was dubious, and disturbed sleep or an indigestion would bring on a thunder storm. Mrs. Carlyle grew continually more feeble, continual nervous anxiety allowing her no chance to rally. Her indomitable spirit held her up, she went out little in the evenings but she had her own small tea parties and the talk was as brilliant as ever. Carlyle worked all day, rode late in the afternoon, came home, slept a little, then dined and went afterwards to walk in the dark. Any one who spent the evening there generally found Mrs. Carlyle alone. Then Carlyle would come in, take possession and deliver himself in a stream of splendid monologue wise, tender, scornful, humorous as the inclination took him but never bitter, never malignant, always genial, the fiercest denunciation ended in a burst of laughter at his own exaggeration."*

Mrs. Carlyle from the effect of stress passed into a decidedly chronic nervous state from the consequence of which she died after a life of torture. Carlyle, with all the allowance Froude makes, is the underbred, spoiled, narrow utilitarian, British philistine without delicacy. Garnett points out that:

Carlyle's interest in science and poetry was solely ethical. If he could connect a scientific discovery or hypothesis with what he deemed a truth in religion or morals,

* Froude's "Life of Carlyle."

he was delighted; if like the Darwinian theory it came in company with an unwelcome conclusion he was disgusted, but he admits his indifference to even such a hero of research as Faraday if his discoveries had no visible influence on human conduct or welfare. It was the same with art: cathedral architecture impressed him as the incarnation of religious feeling but his taste in painting was that of any Annandale peasant.

Carlyle totally was destitute of any deep sense of pure, poetical, artistic or scientific beauty. He acted to his wife as men of the same grade of social culture do under like circumstances. The pathetic tragedy of the Carlyle household occurs when a boor is united to a lady.

The sudden deaths of Mrs. Carlyle and her mother at first sight seem to indicate neuroses in the Welsh family. Both died at a relatively advanced age suddenly; Mrs. Welsh from apoplexy, Mrs. Carlyle had gone out riding, she was in unusually exuberant spirits. A carriage ran over a dog, she stepped out, picked it up and took it into her carriage. Her unusual repose for some time thereafter startled the coachman. At his request a lady opened the carriage door to find Mrs. Carlyle dead. There was naught in common with the two deaths except suddenness. Mrs. Carlyle had been subjected to terrible nerve strain of a continuous type. Mrs. Welsh had had a peaceful life during widowhood secured from pecuniary anxiety by the forethought of her daughter.

The shock of Mrs. Carlyle's death on Carlyle flung him into a dazed state marked by periods of decided amnesia. He wrote the "Reminiscence" paper on Irving at this time. Froude says that so singular was then his condition he was afterwards unconscious of what he had done. Ten years later when Froude found the Irving MSS. and asked about it, Carlyle did not know to what he alluded.

Carlyle's position toward science was that of a newspaper cad. He offered himself as an astronomer with an audacious disregard of his lack of training which shocked his friend Jeffreys. Carlyle was an incarnation of the newspaper spirit which to-day evolves science from its internal consciousness. Goethe, Carlyle's idol, was one of the

noblest earliest exponents of evolution. Carlyle's friends, Tyndall and Lecky, were earnest believers yet Carlyle, Froude's man of continuous sincerity, ridiculed evolution while dreading its truth. Certainly as presented by Tyndall and Lecky, evolution was full of promise. They saw the untruth of Tennyson's grim satiric picture:

"Evolution ever climbing after some ideal good,
And Reversion ever dragging Evolution in the mud."

They saw that while evolution at times tended downward as the fittest to survive, reversion tended upward. They saw the genius in the degenerate as an expression of healthy atavism. Carlyle was a cataclysmist. Despite his Calvinistic training enunciating survival of the fittest in the doctrine of election, despite his recognition of the struggle for existence in the image of the hyssop which grows in the cranny of the wall because nothing can prevent its growing there, Carlyle remained a Scotch borderer righting wrongs by the strong hand and accepting the old fetichitic dualistic creed of the universal; an eternal evil principle striving against the eternal good. His "Hero as a God"* gives definite expression to this creed, Carlyle had much of the canny Scotch and used his very dourness to advantage. To Tyndall and Lecky, Carlyle so played the part of a promising neophyte to evolution that Tyndall was shocked to the quick by Froude's conscientious revelations of Carlyle's insincerity.

Carlyle's position toward the United States was equally caddish. Carlyle had been brought into contact with one of the noblest evolutions of American Calvinism, Emerson, who could see the Quack in Napoleon which Carlyle's border bias failed to discern. Emerson possessed his soul in patience which Carlyle never did. An evolutionist, he sympathized with the great reformatory movements which Carlyle viewed with contempt. An individualist like the great American sociologist and scientist, Thomas Jefferson, he believed evolution would dispose of slavery yet struck a blow at the slave plutocracy. Like the higher type of the

* "Heroes and Hero Worship."

older puritans, Emerson had a heartfelt desire to see men set free while Carlyle only cared to see them strongly governed, Emerson in all phases of thought was an individualist. He was the more reverent of the two yet to minds accustomed to excathedra dogmatism, his individualism and tolerance seemed to steep with patronage his manner in denouncing blatant theology. One of his youthful sermons was thus described by a hysterical female: Waldo Emerson came last Sunday and preached a sermon with his chin in the air in scorn of the whole human race. When Emerson spoke on religion which claimed a special limited revelation, his chin seemed to be "in the air." He had the democratic contempt for any one who claimed to be nearer God than the race at large. At a time of deep discouragement, aid to Carlyle had come from America through the gentle Emerson both pecuniary and mental. When Britain was deaf to Carlyle, America had kept him on his feet yet his boasted originality, when his need passed away, became as it often did, an echo of the snobbish cant of the cotton spinners around him. The publisher Field received characteristic bear-like treatment from him. "So ye'er an American," said Carlyle to Jas. T. Field who admitted the sin. "That's a wretched nation of your ain. It's all wrong. It always has been wrong from the vera beginning. That grete mon of yours—George—your grete mon George was a monstrous bore and wants taking down a few hundred pegs. "Really, Mr. Carlyle," replied Mr. Field, "you are the last man in the world from whom I should have expected such observation. Look at your own book on Cromwell, what was Washington but Cromwell without his personal ambition and without fanaticism." "Eh sir," responded Carlyle, "George had neither ambition nor religion, nor any good qualities under the sun—George was just Oliver with all the juice squeezed out." This was simply an echo from the gigmanity, the respectable British philistine, whom Carlyle so decried but so frequently emulated. Tennyson was another performer to the same tune. Charles Sumner being abroad in 1857 met Tennyson. The Senator never remarkable for modesty talked to the poet of American poli-

tics and his own position toward the south and slavery. He soon perceived that the Englishman was very impatient under his discourse and recognizing the familiar truth that a man is a bore who talks about himself when you want to talk about yourself, he dropped the subject in order to let his companion play bore.

Tennyson seized the opportunity at once. As they were in the library he took down a volume and asked: "Have you ever read 'The Princess'?" Sumner replied that it was one of his favorite poems. "Read it then," demanded the bard pushing the book toward him. Although fully conscious of the extreme delicacy of reading verses before their author he opened to the page and began. He had not finished twenty lines before the Briton almost snatched the volume from his hand saying "this is the way it should be read." Then in his high pompous chanting tones he recited the greater part of the poem affording his compulsory listener no chance for a word. Sumner endured it all without protest but never called on Tennyson again.

The American poet, T. Buchanan Read, in 1861, invited to meet Tennyson by a common friend, went, with enthusiasm to see the illustrious singer. He found a thin faced fussy man with scant hair, blue glasses and round shoulders—the reverse of his ideal. Immediately the Briton broke out with: "I wish to say, Mr. Read that I have in the part had a liking for your country but as it is now plainly going to the dogs I feel bound to tell you that you must not look for sympathy or aid from us Englishmen." Nettled at such unpardonable rudeness, Read replied with proper heat: "Do not disturb yourself, Mr. Tennyson, about our country. We don't care a ——— either for you or your aid or sympathy. It is not worth having under any circumstances. We propose to fight this thing out ourselves regardless of Europe. John Bull and his noble family can go to——for us. We Americans are not going that way just at present." This insolent response instead of offending Tennyson had a mollifying effect. After that according to Read "Tennyson spoke very kindly of America and Americans. If I allowed his effrontery to pass in silence he would have had no respect for me. The only

way to get on with Englishmen who bully you is to bully in return."

The same spirit is shown in the way Carlyle was gulled by a lunatic into publishing his forgeries. Beautiful as the Cromwell epic is, it had, as Richard Garnett* remarks, a comic after-piece in the "Squire Letters."

William Squire, who introduced himself to Carlyle in January 1847, deluded him into publishing in "Fraser" and afterwards in his third edition, a number of letters purporting to be written by Cromwell, the originals of which Squire had himself "destroyed in a sulky fit." Carlyle should have seen the improbability of this. His deportment towards critics who did see it, was peevishly ostrich-like. He would have less easily become Squire's dupe, had he known nothing of him personally, but he had made an accurate study of the man, so evidently on the road to the insane hospital. Squire, crafty as well as crazy, had dabbled both in archæology and fabrication more than Carlyle suspected. The letters were insignificant which in itself was suspicious. Their little internal evidence condemned them.

Macaulay's demonstration of the insane source and character of these, despite the fact that he was as great as Cromwell, later as Carlyle, was never forgiven by the latter. The blow to his oracular infallibility persuaded Carlyle that Macaulay was a choice gigmanite or philistine. Evidence of this he found in Macaulay's tendency to evolution rather than revolution as a factor of advance. Froude states that:

Among the infirmities of age, a tremulous motion began to show itself in Carlyle's right hand which made writing difficult and threatened to make it impossible. It was twitching of the muscles, an involuntary lateral jerk of the arm when he tried to use it. And no misfortune more serious could have befallen him for it came, he said, as a sentence not to do any more work while thou livest—a very hard one, for he felt a return of his energy. In brighter hours he saw many things which he might write, were the mechanical means still there. He could expand the thoughts which lay scattered in his Journal. He could occupy himself at any rate in itself so necessary to so restless a spirit. He tried dictation but it resulted only in "diluted moonshine."

* Garnett's *Life of Carlyle*.

The paralysis was an occupation disease curable or ameliorable by training of the left hand in any but an ex cathedra irritable egotistic prophet reckless of all hygienic and medical advice. The same egotism prevented dictation.

I have summarized the life of this philistine of genius, from his "Reminiscences," from Froude and Garnett, from interviews with his youngest sister and other sources. Carlyle to me seems a pure product of his surroundings and in no sense insane. Everything in Carlyle's career would have occurred under the circumstances to a Scot of the same type. Study of Scotch theological controversies reveals scores of such minds. The destination for the pulpit set Carlyle on a pedestal which made him early a Sir Oracle. Jeffreys struck at the blot albeit not realizing its depth when he wrote to Carlyle:

The great source of your extravagance and of all that makes your writings intolerable to many and ridiculous to not a few is not as much any real peculiarity of opinion as an unlucky ambition to appear more original than you are.

There is too much tendency to shelter the delinquencies of genius under the irresponsibility theory. Neither charity, science nor justice demand such a plea in the case of Carlyle who should be tried by the standards set by himself. The philistine is rarely a materialist. He has generally an atavistic fetichitic fondness for platitudes with a dash of the occult. In part Carlyle's success and his so-called peculiarities illustrated this phase of mentality.

SPOT SPECIALISM.*

A Plea for the Treatment of the Entire Patient.

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WHAT I mean by Spot Specialism is that kind of professional thought and practice which confines its observation and remediable efforts too exclusively to a particular locality, organ or group of organs of the body, without taking due account of the inter-relation of local and constitutional states, the reciprocal influences of local disease on organism in general and of organism on disease, the patient as a whole being too often either lost sight of, or inadequately considered, especially the many precedent and pre-determining conditions of the patient. In practice, too much of the general condition of the patient is regarded, through concentration of thought and treatment on a single organ, as the consequence of the local disease, whereas some or many of the patient's symptoms are due, in almost every case, to the developing or developed break down in general organism and particularly in the nervous system, which made the attack and progress of the local disease a possibility, as for instance when the nucleogenesis or neuclein

* Read by Title, November 23rd, 1894, at the Mississippi Valley Medical Association, at Hot Springs, Arkansas. Subject to be continued at the forthcoming meeting, at Detroit, Sept. 3rd to 6th prox.

† When the committee solicited from me a contribution to the intellectual *pot-pourri* of this most intellectual feast of reason, I scarcely appreciated the gravity of the task I had assumed in designating so extensive a subject as the one I have named. I confess to having made a hasty decision. The subject happened to be running in my mind at the time and I turned to my assistant, handed him the letter and requested him to designate the alliterative title of the theme, which has been announced. It soon became evident that I had selected a theme which could not be adequately treated within the allotted twenty minutes.

forming power of the blood is so impaired that microbes may live in the blood and tissues, and what we call resistance, which consists in the tonicity of the nerve centers, as well as in the amount and quality of the neuclein, is impaired, permitting the lodgement of disease germs in the tissues and the consequent development of their peculiar diseases and sequent morbid actions of organs or organism.

This sort of spot specialism is not confined to practicing specialists as we understand them, but is the fault likewise of the general physician, that ubiquitous and all around practitioner for whom the amiable specialists are constantly expending their brains in monograms, pamphlets, lectures and don'ts, and who gives the narrow specialist in return many practical points about treating the whole patient when he is sick apparently only in a spot (if we look at him with our eyes centered only upon the locality or organ which is chiefly disordered and causes the patient's principal discomfort). This is when the *loci resistencia minores*, so often quoted by our German authors, are discovered in our patients and particular diseases develop, as for instance, Morbus Brightii after rheumatic neurasthenia and anemia.

General medicine, beginning with Hippocrates and followed by Sydenham, is responsible for having piled upon the long suffering liver innumerable diseases beyond its capacity to bear. Sydenham almost made the Englishmen of his day believe that they lived solely because of their livers, while Abernathy made health depend chiefly on their stomachs, so that whenever they were ill the liver must be disgorged and the stomach put to rest. This was pretty good practice with the limited therapeutic resources of his day, for the average Englishman gorged both, and a good emetic and a chologogue relieved both and gave the whole man a rest. This is good initial practice for our day in many conditions, too often overlooked, of general nervous exhaustion and consequent debility of the nerve centres upon whose tonicity the integrity of function of both stomach and liver are greatly dependent, and there was some reason for the frequent phlebotomies of the preceeding century. But to stop here

is only spot specialism, for atonic neural conditions precede hepatic torpidity, as well as follow it, and dyspepsia or apepsia, and this may precede or follow an anæmia or toxic cachaemia.

Fortunately in practice, often, the emptying of the liver and the stomach, and the diet we prescribe, give the patient the rest he needs, as bleeding used to do in plethoric states and hyperemia, and with the return of organic recuperation the local conditions do not immediately re-appear and we pronounce the patient cured. But is he? No. Not entirely in the majority of cases. Something precedent in the general condition of the patient has led to those states of the two important viscera which have attracted our attention, and if we are wise physicians, we will keep our patient under observation and treatment until the patient is perfectly well all over with no tendency of the local disorders to recur. In the audience before me of physicians of the great Mississippi Valley and its tributaries, I need only refer to the potency of malaria in inducing haepatic, pulmonic, cerebral and other organic congestions to confirm this position.

Medicine of our day discards emetics and substitutes gastric antiseptics and lavement, and the washing out of the stomach has even become somewhat of a fad with the spot specialist, who finds that nearly all of his patients who will submit to the inconvenience and give the time to the operation need to have their stomachs washed out for nearly every state of distress in that organ. But there are precedent as well as consequent states to gastric disorder even to ulceration.

Since general medicine dropped the humoral pathology, it has given up the liver, the stomach and the kidneys as the chief source of most of man's ailments, whilst gynecology has centered about all of unfortunate woman's diseases on the uterus and its adnexa.

The advent of the microbic theory and advances in knowledge of the nervous system have somewhat tempered the ardor of the spot specialist, and gynecology, seeing the persistence of certain of the so-called woman's diseases,

notwithstanding the removal of most or all of her special anatomy through its advanced and skillful operative technique, has revised its pathology and diagnostic methods and now candidly concedes that there are many neural counterfeits of what it formerly termed uterine disease, just as neurology long before had proclaimed.

The pessary has had its day and found its proper place; clitoridectomy has gone glimmering and yet it is a valuable procedure, and the cervix is not now often severed as a therapeutic procedure, because this important department of medical work now, more than heretofore, considers the whole woman and has abandoned the once regnant spot specialism of this part. It now recognizes that woman has a nervous system that influences her uterine, as well as a nervous system to be impressed by conditions of her generative organism, etc., etc.

Gynecology has passed or is being lead by its best minds from under the cloud of spot specialism. Woman has diseases such as man may have, and the uterus may or may not be a factor in them. The later specialties must soon follow.

Normal ovariectomy for general or cerebral nervous conditions has come and gone, but oophorectomy of the diseased organ preceding or even following the development of neuropathic states still has a valued place in neuro-gynecology which can no longer be dissevered from gynecological practice.

Notwithstanding the abuse of this operation and the wrong done to woman by a too narrow diagnosis of the causes of diseases of her nervous system through the errors of a too limited spot specialism, a wider gynecological neurology finds a place for this operation. Even as I write, my post-man places before me a record of a successful oophorectomy for the cure of insanity by Dr. Eliot Gorton, of the New Jersey State Hospital for the Insane, and the operation has often been justifiably done for the condition, though it has been too often unwisely advised.

An hereditarily predisposed female psychopath will show special tendency to active development of the latent predis-

position at periods of approaching sexual maturity, and during reproduction and at the decline of this function, and the broad specialist will take the individual and her whole morbid history, personal and ancestral, into account as he examines with erudite tact the organs which make up the sexuality and individuality of woman.

Specialism will, in the future, prove either a bane or a benefit to mankind and to medicine in general, as it narrows or widens its view of the part of the organism in which its work and research are limited. The multiplication of special societies and their aggregation into general societies of aggregated specialties, each addressing always its own set and circle, must tend to contract rather than expand our medical view of man in disease, or, if not that, at least to professional segregation, and continual segregation would be disastrous to the highest and broadest professional advancement and lead to the ultimate disintegration of the profession.

Special work is right enough. It is a necessity growing out of the vastness of the field of effort and its continual expansion, but restricted thought in the practice of a specialty is detrimental to the patient's interests and the doctor's judgement and skill. When one is ill, it is the entire patient who needs our attention, not alone the most afflicted spot.

The interlacing and overlapping of the specialties and the relationship of part to whole and whole to parts of the organism, makes general medical knowledge essential to success in any specialty.

This inter dependence and relation is well illustrated in the practice of the neurology of women and in the treatment of special gynesiatic disease. They might be called the twin specialties, because so many of them come from the same source.

The relations of the uterus to the nervous system and of the nervous system to the uterus and uterine appendages makes this apparent at a glance.

The gynecologist should be a neurologist and the neurologist, unless he would ignore the nervous disease of

women, should be a gynecologist, not in manipulative or operative skill, but in knowledge, and both should have as wide a general clinical and diagnostic skill as the general practitioner of medicine. As a rule when woman is constitutionally ill she needs the combined skill of both. Gynecology should know when to call on neurology, and the latter when to call on the former.

What is true of the relationship of uterine to general neural states is true of the liver. One of the sources of icterus, besides its mechanical source, is through psychoneural impression by means of the vagi and accompanying projection from the sympathetic. Other hepatic states, like congestion and so on, may be similarly understood.

That all sufficient explanation of the genito-urinary spot specialist, Bright's disease, has to the broader minded specialist, as it has to the neurologist and the general practitioner, an antecedent neuropathic explanation, as in the previous psycho-neural strain before the Czar broke down with Morbus Brightii, or the two Napoleons, our General Grant and Senator Benton with cancer.

Make a section of the renal plexus around the renal artery or puncture the floor of the fourth ventricle and polyuria results. Stimulate the cord below the medulla, the polyuria ceases and the secretion of urine is arrested through contraction of the renal arteries. The nerve center for the renal nerves lies in the floor of the fourth ventricle in front of the origin of the vagus. Irritation here gives diabetes insipidus, with simultaneous albuminuria and sometimes sanguinuria. Near this center lies also the center for the vaso motor nerves of the liver, irritation or injury of which, causes diabetes mellitus. An inflammation, a tumor, a gumma, an abscess or an aneurism of the medulla so as to affect this region, gives disease of both of these important viscera, as well as of the stomach. Section of the splenic nerve temporarily increases the urinary flow.

These and similar other physiological facts, such as cord injuries, which lead to distention, and the increased reflex excitability and feebleness of the cerebral inhibitions of enuresis nocturna, are sufficient to suggest the drift of our

plea for considering our patient all over, nervous system and all, when we have a local trouble to deal with, and the junior spot specialist who asks the general practitioner to stand back while he gives him the light of his local knowledge, may not always know it all himself.

What is true of morbid conditions of the liver and kidneys is equally true of those of the the stomach, intestines, bladder and thoracic viscera.

We now treat the constipation habit not by simply emptying out the alimentary canal of its waste contents, but by toning its neuro-muscular mechanism through the adding of nux vomica and belladonna and electrizations, especially static, to pure alvine evacuants, and he who would treat dyspepsia with digestive agents alone and not with a view of increasing the tone and power of the peptogenic glands through their dominating neural mechanism and the reconstruction of both through the blood would be no more successful than the physician who would rely on cathartics exclusively for remedying constipation. The primal source of dyspepsia is more often in the brain than in the stomach, as Brigham long ago asserted, and cerebral exhaustion and general neurasthenia are often the precursors and cause of intestinal atony, and an irritable and impaired vagus affects the heart and lungs. Through these states, a flatulently distended stomach may produce an irritable heart and disturbed respiration by reflected irritation to mudulla and down again, or the conditions may be solely cerebral and proceed directly from medulla through the many and wonderful distributions of the pneumogastric branches.

The paralysis of the vagus nerve gives us the so-called pneumonia and heart failure of la grippe, and the lung or heart specialist who overlooks the power a damaged vagus has for mischief, and the relationship of this toxic neurosis to the development of other grave local symptoms, is a spot specialist who ought to be spotted by the general practitioner when his name is suggested as counsel, for influenza has developed both diabetes and Bright's disease, as well as heart and lung paralysis and general motorplegia, where, as in consumption, the broad practitioner finds a place

for strychnine, which the spot specialist might think of in connection with his treatment.

As vertigo may come from states of the stomach, impressing the vasomotor centers of the medulla through irritation transmitted along the vagus nerve, so nausea, loss of appetite and failure of gastric digestive secretion may proceed from states of the brain, and good news, bad news, fret, worry or fright may impress the stomach, bladder or bowels, as well as the heart, the lungs or the liver and even the condition of the skin. Ohmann-Dumesnil, of our society, and other dermatologists have recorded so many examples of skin diseases produced through impressions on the nervous system that neuro-dermatology has become an almost distinctive department of research. We are all quite familiar with them from eczema to herpes zoster, urticaria and vitiligo, and the dermatological special practitioner who would fail to recognize the neuro-dermatological diseases would be a spot specialist of too limited a range of observation for professional confidence.

What is true of the organs and systems I have mentioned, is equally true of others. Take the eye for another example and the ear and throat for others. The oculist who takes no account of the state of the nerve centers of accommodation and the general cerebro-spinal centres, influencing ocular states, may correct, without permanently improving, vision by means of his properly adjusted glasses, but if he should also look after the central nerve tone of the region of the crura, the *iter*, the cilio-spinal center of the cord, the quadrigeminal bodies, the thalami and the whole visual area of the brain, as Munk has demonstrated it, he would have more cures for his labor. In short, the brain often needs careful consideration, as well as the visual mechanism of the orbit, and so of aural disease, for its timely remedy may save the neurologist from having a meningitis, pachymeningitis or leptomeningitis or cerebral abscess to treat, and the conditions of those continuing obstinate catarrhs, which worry the patient and the life out of the nasal specialist, are often vasomotor states and part and parcel of the patient's general lowered nerve tone. They need

local treatment, to be sure, for alleviation, but often constitutional, as well as local, for cure; and the action and reaction here, as in so many local with conjoined constitutional states, are reciprocal. So there is no place, even in noses, for the junior spot specialist, who, fresh from college, imagines he can be successful with the diseases of the nares and nasopharynx through local manipulation alone, combined maybe with a few routine general tonics. He too must be a doctor in order to be successful. And the general practitioner who does not comprehend how anæmia and marasmus in children especially may give rise to embolism of the cerebral sinuses and the consequent meningites and localized brain congestions, etc., is a spot practitioner of too limited a range of observation.

Take another instance of morbid impression from above downwards, viz.: those reflex vomitings which proceed from tumors of the brain stretching the dura mater and sending the morbid painful irritation over the long sensory prolongation of the fifth nerve (which is the nerve of sensation of the dura) to its root and thence over the vagus (whose root is so close to it in the medulla) down to the stomach, and the phenomena of sick headache dependent upon this same neural relation.

And so I might go over the whole organism and its many local diseases and find a similar showing as to the necessity of knowing medicine in a general way in order to give the patient successful special treatment.

Each specialty is dependent upon every other for aid, all are dependent more or less upon the general principles governing the development and continuance of disease in the human system. While there is abundant room and need for the special worker, because of the magnitude of the labor of the physician who would attempt to treat all diseases, there is no place in medicine for the spot specialist. The specialist may work in as limited a field as he may please, but he should think and study the patient all over. As a general practitioner gradually developed into a neurologist, I acknowledge my indebtedness to a general knowledge of medicine from a sufficiently large and length-

ened previous experience to keep my mind alert to influences of the whole organism on the system which has engaged my special attention, and of that system on the whole organism and upon its several parts, organs or systems, for whatever of success may have attended my efforts in practice.

The afferent reflexes seem to be better understood and appreciated in the practice of general and special medicine than the efferent morbid impressions proceeding from the brain and cord. An epilepsy, for instance, of ovarian, a convulsion of enteric, a vertigo of gastric, or an epilepsy having its source in bladder, irritation, being better understood and conceded than morbid states of organs induced by disease in the cerebro-spinal and ganglionic centers. But to know a patient all over is the duty of the physician, and this is to know well his nervous system in relation to diseases.

The neurologist should appreciate the toxic blood states that impress the nerve centres, like syphilis, influenza, rheumatism and the bacilli of tetanus and possibly of chorea, etc. The more local specialist should study and appreciate these and those of the nerves induced by them, over the special organs claiming his particular attention. The gynecologist should realize that a congested and irritable ovary of to-day may be the irregular acting heart of to-morrow, and the tender spine or painful neuralgia, as a later metastasis, while the pranks that gout plays with different organs and the freaks of hysteria and the spasmodic diathesis, should be a present possibility in many diagnoses.

One of my earliest triumphs in neurological practice was the result of a clinical fact I had learned while a surgeon in the army, viz., that the malaria of our Mississippi bottom lands is capable of producing non-periodic paralysis. The case was that of a child with an apparently sudden attack of poliomyelitis anterior acuta. She was brought to me in her mother's arms, helpless below the knees. Under heavy daily ministrations of quinine, arsenic, sodium bromide and hypophosphites and regular galvanism, she could stand by a chair within a month, and go across

the room at the end of six weeks. She is now a mature woman, vigorous and robustly healthy.

My success in neurology was here due to my general medical observation.

Another instance was in a case of acute melancholia in my military hospital at De Soto, Missouri, during the war, where the soldier was promptly cured of his melancholia and fistula in ano by the proper operation on the rectum; and in my experience as Medical Superintendent of the State Hospital for the Insane, it was often necessary to treat a patient for many morbid conditions, sometimes nearly all over, before the cure of his insanity could be accomplished.

And now after more than a third of a century of daily study of man's entire organism in relation to disease and nearly a quarter of a century in the study of neurology and the practice of neuriatry, I consider the vital centers of the medulla, the sweat, heat and reflex centers of the brain and cord together with the glangionic system, and the correct comprehension of their relations to disease, of far more importance in the practice of medicine than the study and treatment of any number of organs of the body without this knowledge.

The phenomena of hyperidrosis and anhidrosis are all dependent on the nervous system and it is as important to understand this fact as it is to know anything else connected with the diseased conditions, diabetes, cancer, dementia paralytica, etc., with which the latter phenomenon or the neurasthenia, hysteria, epileptoid states, phthisis, or rheumatism of the former is connected. The same is true of haematohidrosis and other forms of paridrosis associated with other conditions; yellow fever for instance and pyrexia, which can be produced by brain and nerve lesion, is the result of nerve center irritation, as well as of toxic origin, and the latter form of fever seems only possible through heat center disturbance. Albuminuria has to have a central nerve break-down origin and may come and go as I have often seen, under certain over nerve strain straits, and Bright's disease is not the beginning of the

disease we call by that name. A breakdown in the nervous system always preceeds it.

One thing is certain, the influence of the nervous system can not be overlooked in any attempt at a proper understanding of diseases or their symptomatic expression, nor in seeking to comprehend the metabolisms of the organism in health or disease. If we give our attention to it, it will lead us all over the organism, for it is practically omnipresent, and, if we study it in relation to disease, we will study our patient all over in the treatment of his morbid conditions whether they be considered as local or general diseases.

It will lead us to a more comprehensive understanding of the nature and relations of disease everywhere and give us valuable suggestions as to diagnosis, prognosis and treatment. It will lead oculists to go behind the eye for a perfect understanding and treatment of many eye defects, gynecologists to treat the woman as well as her womb, neurology to consider the blood and organs that influence it and the nerves, surgery to consider the psychic and neural impressibility, tonicity and resistance of patients, general practitioners to duly regard the relationship of the whole organism to the development and progress of particular diseases and all specialists to study the whole patient while they practice in but a part of the body. Likewise the nerve specialist and the general practitioner will interrogate the anto-toxic, rheumatic, the malarial, venereal and other toxic factors in all diseases.

MORAL PARANOIA.

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Read before the Nineteenth Annual Session of the Association of Medical Officers of
American Institutions for Idiotic and Feeble Minded Persons,
New Haven, Conn., May 28th, 1895.

STANDING on the threshold of a new century we rejoice in the riches gathered from an age of invention, and in freedom from the trammels and tyrannies of the past. Religion, philosophy, education, jurisprudence and medicine, all exult in this disenchantment from old traditions, and meet on common ground to form a new and grand school of humanitarianism.

In no field is this so marked as in our own, for in none were the difficulties so great, ignorance so intense, thought so perverted, as in the judgment and treatment of mental defectives; unless it be in the mal-treatment of those whom society and the courts failed to recognize as such—more especially of that peculiar class of unfortunates to whom I invite your attention to-night—the moral paranoiac.

The term “paranoia” of Greek origin, is derived from *para*, *noeo*, to think; and a peculiar form of mental disease is under this name recognized by ancient classical writers, such as Æschylus, Plato, Aristotle, Arrianus and Plutarch. It then fell into disuse and we do not find it again until 1764 when Vogel described nine forms of neurosis under the collective term of paranoia.

Heinroth* in 1818 uses it, but to Mendel† belongs the honor of analyzing it, and of reducing it to its modern signification.

This subsequently described and elaborated by Esquirol,‡ Griesinger,§ Morel|| and Snell,** becomes the subject of a

* Lehrbuch der Störungen des Seelenlebens, 1818.

† Eulenberg's Real-Encyklopädie, Bd. XV. S. 216.

‡ Des maladies mentales, t. II, 1838.

§ Die Verrücktheit p. 382. Traité des maladies mentales, 1860.

|| Etudes cliniques, 1852.

** Ueber Monomanie als primäre Forme der Seelenstörung, (Allg. Zeit. f. ch.), 1865.

series of observations by Westphal,* in 1878, and has since been further elaborated by Leidesdorf,† Koch,‡ Jung,§ Krafft-Ebing,|| Kroepelin** and others.

The researches of these scientists, together with the results of later experience, present to us two classes of paranoia:

THE MENTAL; in which the intellect dominated by one or a set of fixed ideas or delusions, gradually weakens and degenerates, the ethical sense not necessarily implicated, though sometimes developing a morbid abnormal conscientiousness.

THE MORAL; which shows the ethical sense along certain lines in some cases *weak*, in other cases altogether *wanting*, and which may or may not be associated with intellectual deficiency, but often is with intellectual precocity.

In both the *ego* is magnified, there is an intense self-contemplation, a sense of self-exaltation, of persecution or pursuit by individuals or ideas. The victim weaves a crown of straw, is a noted, perhaps a royal personage or the beloved of one; the woman who starts for Washington as the bride of General Belknap whom in reality she has never seen; the man who believes himself the favored suitor of Queen Victoria; the poets laureate, brave soldiers and great inventors, who people all our insane hospitals; as do the wretches consigned to the nethermost hell; or the morbid and the solitary who finds himself unworthy of society. To these on whom despair sits brooding, is not "reserved" but is already come, "the blackness of darkness"—Death eagerly sought is an open sesame to "Anywhere, anywhere out of the world." The victim of a fixed idea foreshadowing, leading or impelling to certain results. Drake with his vision of the white bird; Joan of Arc and the voices; Ravallac; Marat; Wilkes Booth; Guiteau; Penderghast and Cesario, are all types: not to speak of the vivid

* Ueber die Verrucktheit, (Allg. Zeit. f. Psych., B. XXXIV, S.) 1878.

† Causistische Beitrage zur Frage der primaren Verrucktheit, In Psych. Studien Wein.

‡ Irrenfreund, No. 8 and Beitrage zur Lehre von der primare Verrucktheit (Allg. Zeitsch. f. Psych., XXXVI).

§ Allg. Zeitsch. f. Psych., B. XXXVIII.

|| Lehrbuch der Psych., and also Lehrbuch der gerichtliche Psycho-Pathologie.

** Comp. der Psych.

pictures presented by men of genius, whose one idea first dominating the individual before dominating the world, is but another proof of the inexplicable law of degeneration—the richest fruit ripening prematurely to its fall.

When the theory of moral imbecility or moral paranoia was first advanced, it was considered by many, the so-called learned and wise as “*Algri somnia vana*”—the idle dreams of a distempered brain. In common with all great discoveries it has had to fight for its existence, and is even now in the polemic stage. There are yet not lacking those who will recklessly commit to the scaffold or the penitentiary the moral imbecile, not realizing that in so doing they punish disease not crime. There are those who object to the term itself, though used by such authorities as Bucknill and Tuke, Maudsley and Spitzka.

“Ordinary idiots are mostly to a great extent idiotic morally as well as intellectually. . . . Although we do not admit what can properly be called moral idiocy apart from more or less lesion of the intellect, we fully grant that there may occasionally be good intellectual abilities in association with congenitally feeble moral powers and volition (a moral *insensibility*), and therefore a proportionate irresponsibility.”—Bucknill and Tuke.

“There are certain beings who are truly imbeciles. It is remarkable indeed, what an acute intellect may sometimes coexist with an entire absence of the moral sense.”—Maudsley.

“It may be advanced as a cardinal canon of psychiatry that in insanity the moral feelings are usually more or less dulled or perverted. The deficiency of the moral feelings may, however, be of a different kind; in certain cases it may be a necessary result of intellectual enfeeblement, it may be due to an obtuse emotional condition, or it may be an *original deficiency* analogous to the lack of musical sense, or color-blindness, which may coexist with a fair faculty of language and good contour perception, just as that moral imbecility which authors call moral insanity may be found associated with fairly good logical powers in the abstract. An intense egotism is sometimes found to lie at the root of

a constitutional inability to recognize any moral obligation to others. There are subjects whose reasoning powers are fair, whose memory is excellent, who are perhaps accomplished in the arts, but in whom the moral sense is either deficient or entirely absent. The term Moral Insanity of authors should be limited to this class of subjects, and a much better term to use would, in the writer's opinion, be Moral Imbecility.—Spitzka.

"We find that either concomitant with intellectual disease, or even singly, the moral power of the mind may be perverted or entirely obliterated, exhibiting itself in entire moral perversion, in an inability to control conduct, and in total suspension of natural affections."—Lockhart Robertson.

"It seems not improbable that many persons, wrong-headed and perverse through life, and singularly capricious and depraved would afford in reality, if the matter could be ascertained, examples of Moral Insanity, native or congenital."—Prichard.

MORAL PARANOIA, as above suggested, divides off into two classes: First, where the moral sense, owing to unfavorable environment, has not been developed, or through accident or disease is arrested; is weak, yet capable of some measure of development through training: children and adults from all grades of society recognized as different from ordinary every day people and who are variously described as queer, nervous, misanthropical, moody; the weak dude; the silly coquette; "they who creep into houses and lead captive silly folk given over to their own lusts"; the idle, lying gossip; the dipsomaniac; the kleptomaniac; the pyromaniac; people not wilfully bad, but of utterly weak wills, easily lead astray, whose weaknesses develop and grow with their physical growth until they astound society with some sudden outbreak. People who crowd our homes and streets, who sit with us and walk by our side, who should be under perpetual guidance and restraint for their own as well as for the sake of society. Many more responsible than they, are now receiving training in the various institutions, both here and abroad, who become useful members of these communities to which it is

now fast being acknowledged they should be ever limited. They are totally irresponsible, and once turned adrift will become vagrants and criminals, or the tools of such, to be used by the wicked for their own base ends.

Second, where due to degenerative tendencies and practices through successive generations or perhaps the taint from some remote ancestor—the moral sense along certain lines is absolutely wanting. The individual is amoral and will ever remain thus. Here the intellectual facilities may be found either defective or more frequently preternaturally developed, rendering this type doubly dangerous to himself and his fellows.

Here we confront the worst class of criminals: the murderer; the harlot; the liar-in-wait-to-deceive; those who love darkness rather than light, whose image faithfully pictured by the immortal Dante finds its living prototype to-day.

Moral paranoiacs, like artists, are born, not made, and indeed what are moral paranoiacs but artists in their peculiar life? Witness those human fiends who flourish in France under the name of "*les agents provocateurs*," who incite men to commit depredations for the purpose of convicting them, yet these are recognized by the police as reputable citizens. The social spy who is constantly on the alert in polite society for the indiscreet act or word to report to the daily press; the religious hypocrite; the confidence man; the bombast; the confirmed tramp—all belong to this class.

In the moral paranoiac there is some want or harmony in the brain, the root and seat we know not of, "but there are no *individual* cases in nature, all *particular* cases are the expression and effect of *law*." Every neuro-psychosis depends on irritation of the cerebrum, which any accidental circumstance may provoke. It may take on different aspects according to the spot attacked, while preserving the same nature; thus we find the traits of precocity and originality developing under some circumstances into genius, under others into moral imbecility; both not infrequently accompanied by marked epilepsy—both results of the same

law, and in diagnosing we must consider the molecular troubles of the cerebrum as well as external signs.

The true amoral imbecile is entirely occupied with his own *ego* which he constantly obstrudes upon the attention of others. As a child we note him self-willed, obstinate, given to unclean habits, delighting in sulking, in annoying other children, and in torturing animals. Hyphochondriasis the natural result of intense self-contemplation is a marked symptom. Prone to exaggerate every trifle, he is never so happy as when under medical treatment, or the severest operation, and insensitive to pain, is a willing victim on the altar of self in whose honor the most nauseous doses are quaffed as nectar.

Two cases occurring in my own experience will serve as illustrations: One, a boy deliberately throwing himself into a vat of hot lye simply to attract sympathy and attention, and watching the operation of dressing his severe burns with the interest of a bystander. The other coolly refusing anaesthetics, and regarding with a smiling face the amputation of two of his own fingers.

Delight in the sight of blood is as much a part of past as present history, and not only does he revel in self-inflicted wounds, but the savage nature is yet further evidenced in a love of tattooing.

A case that has recently come under my notice emphasizes in a peculiar manner the most salient of these idiosyncrasies:

A physician, rich, handsome, cultured, of refined and even aesthetic tastes, a graduate of one of the best medical colleges, made a pronounced hit as a specialist. Enjoying for some years a phenomenal success, wine and women proved his bane, and he sank lower and lower. Finding his excesses could be no longer tolerated in America, he went abroad drifting from capital to capital of Europe, and finally in Japan established himself with a harem. With an appetite still unsatisfied, he exhibited new phases of moral degeneration.

He caused his body to be tattooed with wonderful skill, every picture a work of art. Thus his back bore a huge

dragon, the shading of each scale showing perfection of detail. This, on revisiting America was shamelessly exhibited on every occasion with the utmost pride. Finally returning to Japan, he bought a performing bear and wandered from place to place clad in the garb of a *hinin* exhibiting himself, his bear and his harem, and distributing photographs of each and all in endless variety.

This master in vice, shocking both Europe and America, astonishes even Japan, that country of loose morals.

His latest freak is to hire a squad of twenty little Japanese boys whom he has instructed in military tactics and attired in full uniform. To these at various times he will oppose an equal number of monkeys dressed as Chinese soldiers, and the war of China and Japan is constantly renewed for the entertainment of himself and his harem, who laughing and singing, watch in an ecstasy of delight the suffering of the poor brutes. Rewards are offered, and the more bloody the contest, the greater the atrocities, the more intense his gratification.

Lombroso makes a special point of the physical anomalies of the morally insane, and calls attention to both "cranial and facial asymmetry, precocious synostosis, unusual frequency of left handedness, large orbits, prominence of the zygoma, large median occipital fossa, hair crisp and abundant, nervous contraction of face, and the cold, glassy, immobile look." Such is the being the French would describe as suffering with *Physerie du sang*, a theory of the nineteenth century alone.

In thus associating mental with physical deformity, Italy again finds her inspiration in Greek art where all degrading qualities are pictured under low, sensual forms—and the Greeks, as we know, found their models in nature. That there are exceptions is true. Satan himself may appear disguised as an angel of light, and when an angel face covers moral deformity, then indeed is the being most to be dreaded—he is a vampire preying upon the very life-blood of society.

I have before alluded to the victims of a fixed idea leading or impelling to certain results as the most danger-

ous class. The deeds they commit are those of deluded enthusiasts possessed of all the intelligence that could make a crime terrible. The history of the world is full of brutal murders and other disgusting crimes committed by this class, and all the modern educational means of civilization, such as novels, newspapers, magazines, etc., which go to *elevate* the normal, have in an equal degree a painful and *inverted* effect upon the warped, intellect. They live in a world of their own, and the sane appear to them as abnormal, as they appear to the sane. Out of their delusions of persecution naturally grows the necessity of action to protect themselves from their persecutors. The logic of events continually presses them on, however sluggish and cowardly they naturally may be. They are irritated, and harassed, and vexed, and tormented into aggressiveness, and like Mahomet they enforce their opinions with the sword—often willing martyrs to a solemn sense of obligation.

Oh inconsistency of modern civilization! We who do not require an oath from a Quaker's conscience, hang this wretch for what with him is a conscientious act. Yet we plume ourselves on having passed the days of persecution, and with, "I am holier than thou," draw aside our skirts from the Slave-owner, the Burner of witches, the Inquisitor.

"The line that separates such deluded persons from the criminals proper is a distinct one and has long been recognized by alienists. But the non-medical portions of the community, unfortunately very largely the lawyers and newspaper people, do not appreciate the nature of delusional diseases, do not realize the frequency of instances in which men lose all sense of responsibility, and under which they are regardless of possible harm to themselves. Swift and even cruel methods of punishment may have their value. The court of Judge Lynch may not be without a certain usefulness in a wild section, just as the summary proceedings of a court-martial are universally regarded as befitting an actual state of war, but the majority of people do not understand that measures which appeal to the fears of evil-doers cannot be felt by those who are driven by an over-

powering delusion. These problems cannot be rationally discussed except from medical standpoints, and until our jurisprudence awakens to the consciousness that these acts are the result of disease, bringing the victim into the domain of irresponsibility, no adequate measures will be secured."

"The whole question is, therefore, not one for lawyers but for doctors, and it is hoped that in default of uniform methods by the States themselves some means may be found to secure national legislation that may eliminate from our courts methods of procedure that grow out of ignorance. It is also desirable that the community at large should awaken to a necessity of providing means and methods of restraint for delusional maniacs of all grades and, among other efforts, aim to prevent the propagation of such defective strains."—George M. Gould, *The Medical News*, Dec. 9, 1893.

In support of the statement as to the inverted effects of education upon the paranoiac, I would call attention to the records of jails and penitentiaries showing a large preponderance of the educated class, also represented among tramps, cranks, and rioters. Compare this with the large number of nervous or incorrigible who, for the teacher, make life miserable, and the problem, "Why is there not a more equal balance between results gained, and energy expended in our school system?" may find a medical, in lieu of a pedagogical, solution. The fact once clearly accepted, that, for public health and safety, a certificate showing freedom from excessive nerve trouble is more important than one of vaccination, will lead to a system of registration and grading that will largely purify the school and elevate the condition of both normal and abnormal classes.

The economic factor will be evidenced in the acquisition of space, time, and concentrated energy. First, for the children of pure stock normally developed and fresh from nature studies in the Kindergarten, uncontaminated by bad association prepared and eager for the healthful stimulus which is poison to his weaker brother. Second, for the teacher who released from the strain of striving to mix the unmixable—of dragging the diseased and healthy up to one common

standard—may then be able to reduce pedagogic theories to more certain practice.

The class eliminated can be better provided for in special schools adapted to their special needs and graded according to medical as well as educational theory. Here, removed from an atmosphere which either over-stimulates or deadens, the nervous, excitable, sensitive or peculiar child can receive the attention suited to its power of development; while from these ranks may be separated, from time to time, those on whom the school confers in no sense a blessing but a curse, for whom intellectual gifts are but the instruments of ill. These placed in institutions providing a happy and permanent home shall find in schools of manual training, in the shops, in the varied industries of in and out-door life, a vent for the superfluous energy, or healthy stimulus to the dormant. Freedom from responsibilities, corroding care, or the thousand miseries that goad to ill-doing shall aid them on the one hand, and a firm and well directed discipline sustain them on the other to the attainment of some degree of selfhood; while the individual, the family, and the state shall be spared the ignominy and the cost of criminal trials and punishments.

Dr. Kerlin says: "The practical thought I have to offer is: Let us recognize 'congenital moral imbecility' as a terrible fact." Cannot an almost unerring decision be made by the trained and humane experts of our asylums, jails and reformatories, by which the indeterminate sequestration, under the best conditions for their moral and physical welfare, shall be the practice for those who are congenitally unfit to mingle their lives and blood with the general community?

The early detection of these cases is not difficult; they should be subjects for life-long detention; their existence can be made happy and useful; and they will train into comparative docility and harmlessness, if kept under a uniform temperate and positive restriction. The school-room fosters the ill we would cure; in teaching them to write we give them an illimitable power of mischief; in educating

them at all except to physical work, we are adding to their armament of deception and misdemeanor.

Let us accept this moral imbecility as the incurable infirmity of an irresponsible victim, to whom, as the piteous cross-bearer of the sins of society, we owe kindly nursing and protection against himself by a grateful and total withdrawal from the community, which, in its turn, has a right to demand that he shall not scathe our common stock with permanent taint in blood and *morale*.

These were the theories guiding—in ante-bellum days—the management of many Southern plantations which were neither more nor less than training schools for feeble-minded folk.

Briefly summing up, the vital points to be reached are these: First, the complete and permanent isolation of this class, and his development and happiness best secured through the medium of manual rather than intellectual training. Second, the advisability of invoking legislative aid by the enactment of marriage laws. Third, the emphasizing of the tremendous effect of prenatal influences in producing this class; alcoholism and the abuse of drugs; periods of great distress or misery; ill assorted marriages, as the family physician and parish priest know only too well; the indiscriminate reading of a certain class of books which may be useful to the scientist but most baneful to the unlearned, the neurotic, and especially to the mother. How can a woman bear healthy children who steeps her mind during the period of gestation in such thoughts found, for instance, in the long series of French novels known as "*Les Rougons-Macquart*," in which the psychical side of neurosis is portrayed in the most brutal and realistic manner, and every page presents frightful moral monstrosities.

"Legislative enactments,"* says Sir William Aitken. "regarding the intermarriage of persons tainted by disordered intellect are greatly to be desired, and the concealment of such disorder with a view to marriage, ought to render marriages null and void which are concluded under such circumstances."

* "Science and Practice of Medicine."

Marriage, as it is entered into by the ignorant and the foolish, has been legalized prostitution, flooding whole nations with imbecility. A flood which but increases with civilization as we note members of the cultured class in many lands standing apart from this, as they do from political life, loath to encounter a stream so turbid.

Let those who doubt this read the startling percentage of births as compared with that of imbecility, and ask if the grave fears of the ultimate depopulation of France are without foundation.

I have shown the influence upon the schools by elimination and substitution, read now the same algebraic formula in solving the problem of a nation's life. For the "Crime of Law" wreaking vengeance upon the diseased and the impotent, substitute a beneficent "Protection" guarding the afflicted from society and from themselves, and the pure stock from contamination. Thus in order to secure a marriage license in lieu of the baptismal certificate of the parties demanded in many countries, let them be required to show a family record, within certain limitations, uncontaminated by neuroses—"a clean bill of health", so to speak. This, in no sense attempting to bind consciences, but a simple matter of self-protection by which the State seeks to secure a healthy race. These limitations would naturally have to be broad at first, but would narrow as the bad element was eliminated.

This question of eradication and pervention is a grave one—that of cure, graver still. It shall be a swift and rushing stream that shall cleanse these Augean Stables, but medicine and surgery together shall form the Hercules of the nineteenth century.

We must tap the main root if we would destroy the evil; that means separation of vast territory for the direct purpose of eradication, and the free—I speak literally, not metaphorically—the free use of the pruning knife. Heroic measures these, but it is the war of extermination.

In this day of antiseptic surgery when even major operations may be performed without danger, why not this?

It must be this, or absolute isolation, and why not the

former? That which my master in the work, Dr. Kerlin fearlessly advocated, feeling before his death that light was very near. The surgeon's knife in place of sentimentality, and a nurse instead of a keeper.

Paranoia Impotentia Hypochondriaca.

A Clinical Note by DR. C. H. HUGHES.

AN English bachelor, aged 42, a nurseryman by occupation, lost a good position in Tennessee from inefficiency and absent mindedness, the result of brooding continually over the imaginary misfortune of sexual impotence, in consequence, he thinks, of his not having married or had sexual commerce in early life. He imagines he can never be fit for anything until he has sexual intercourse, and yet that he has not the necessary virile power. He is under the delusion that his seminal fluid is drawn from him by invisible persons or influences through invisible methods at night, who leave no trace of their nefarious operations, and who steal upon him in a mysterious manner while he sleeps. Neither his sheets nor shirts are stained and he has no seminal emissions in the day time or at stool. "They" simply draw off his semen without his knowing it, in some inexplicable way and he is undone because of his virile inability and bankruptcy.

This unfortunate man is of good physique. His height is about five feet ten and a half inches. His shoulders are broad and his generative organs are normally developed. The presence of a slight virile reflex leads me to doubt his sexual inability. It is dormant, I think, but not absent. He confesses to masturbation in early life and has never had natural intercourse, having had moral scruples against unmarital congress and has never been married, as above stated.

This man did not sleep well or eat largely when he first came under my observation and was much concerned with his misfortune, being over-mastered by the dominant delusive idea that he could never be fit for anything till he could copulate with a female. He was and is most seriously

and painfully impressed with the conviction that such an act is an impossibility to him in his present unfortunate condition. He is still under observation and treatment.

His treatment is that of combined medical and psychical impression, *nux vomica*, *codia*, hypophosphites and static electrizations to genitalia and dorso-lumbar region, with the hopeful assurance that his case was not necessarily hopeless; that men with his kind of impotence do recover though with but little faith in his recovery.

He has developed the insane propensity to "move on" and has now found it necessary, he says, to go to Chicago. He leaves me not materially improved, except that he eats and sleeps better and feels a little more hopeful. He carries from me a letter of introduction to Dr. James G. Kiernan, who, I hope (if he delivers it), will give him the benefit of his skill and the profession further record of this remarkable case.

This man is ambitious of success in business and imagines he is secretly persecuted by imaginary foes who, in the mysterious manner above indicated, rob him of his manhood, and might be called according to the designations in vogue an Asexualistic or Aspermatic Paranoiac or a paranoiac impotent. I have called it also *hypochondriaca*, because I regard the impotence as imaginary, without any real relation to his condition, which appears to be entirely psychopathic.

This man showed evidences of malarial toxæmia, but a course of quinine bisulphate did not correct his delusions. Though a delusion of impotence is common—psychical impotence—I have not, in a practice in psychiatry of over a quarter of a century, before seen it in precisely this paranoiac form, with associate delusion of unseen persecutory cause as the final imaginary explication.

3857 Olive Street, St. Louis.

SELECTIONS.

NEUROTHERAPY.

OPIUM IN EPILEPSY.—This treatment, suggested by Professor Flechsig, of Leipsic, is a fallacy. The patient is first given one-half to one grain of Opium, and this is rapidly increased until at the end of the first week he is taking fifteen grains or more a day, in doses of from one to four grains. At the end of six weeks the opium is entirely suspended, and Sodium Bromide (one-half drachm four times daily) substituted. After these large doses of bromide have been continued for some time, the amount is gradually lowered until the patient is taking less than forty grains a day. It is important that the bromide should immediately follow the suspension of the large doses of opium.

The plan is in no sense a specific in the treatment of epilepsy, and though a cessation of the fits for a greater or less time is claimed, relapses generally occur in a period varying from a few weeks to a few months.

[We can do better with thirty grain doses of the bromide, judiciously blended and with hypophosphites, arsenic and pepsine.—*Editor.*]

COCAINE CATAPHORESIS IN NEURALGIA.—Dr. Hunter McGuire (*Gaillard's Med. Jour.*) recommends Cocaine Cataphoresis for the relief of neuralgia of superficial nerves, (such as branches of the trigeminus) when due to local lesions.

He thus describes the *modus operandi* in a case of neuralgia of the lingual branch of the inferior maxillary nerve:

"I took the positive pole of a galvanic battery, covered it with a piece of absorbent cotton, saturated it with a 10 per cent. solution of muriate of cocaine, and placed it in

the mouth over the portion of the nerve which is the usual site of operative procedures, placed the negative pole on the external surface of the cheek, and passed a current of five milliamperes for a period of five minutes. The pain was instantly relieved, and I must confess, much to my surprise, did not return for twenty-four hours, a period much longer than would be required for the effect either of the electricity or of the cocaine to wear off."

ANTIKAMNIA FOR DISTURBED INNERVATION.—Robert B. McCall, M. D., Medical College of Ohio, Cincinnati, now residing at Hamersville, Ohio, has an exceedingly exalted opinion of this drug. After detailing its satisfactory employment in numerous cases he concluded that, "if there is any one drug or preparation that can be made to answer every need of the physician, for the correction of the multitudinous disturbances of innervation that occur in the various diseases he is called upon to treat, that one is Antikamnia."

TOBACCOISM AND ITS TREATMENT.—In the *American Practitioner and News* for February 23, 1895, Kempf tells us how to treat the tobacco habit and its results:

A belladonna porous plaster is put over the region of the heart, and—

Bromide of sodium, $\mathfrak{Z}\text{ii}$;
Fl. ext. cactus grandiflora, $\mathfrak{f}\mathfrak{Z}\text{i}$;
Fl. ext. pulsatilla, $\mathfrak{f}\mathfrak{Z}\text{ss}$;
Fl. ext. passiflora incarnata, $\mathfrak{f}\mathfrak{Z}\text{ss}$;
Water, $\mathfrak{f}\mathfrak{Z}\text{iv}$. M.

Sig.—A teaspoonful, after shaking, in water every four hours; and—

Aloin, gr. $\frac{1}{4}$;
Strychnine, gr. $\frac{1}{60}$;
Belladonna ext., gr. $\frac{1}{8}$;
Ipecac, gr. $\frac{1}{16}$. M
A pill.

Sig.—From 2 to 3 pills at bedtime,

The writer also gives the patient the elixir of gentian and chloride of iron, to be taken after meals. After a few days the patient can go to work, though suffering from severe tobacco heart. He has no trouble in giving up tobacco.

In all cases the best plan is to stop the use of tobacco at once. Nine times out of ten the patient will not miss the tobacco after several days of abstention. The diet should be regulated, and any local trouble, such as nasal or post-nasal catarrh, dyspepsia, and tobacco heart, should be treated with appropriate remedies. The following is one of the best tonics to give the patient:

℞ Gold and sodium chloride, gr. $\frac{1}{24}$;
 Strychnine nitrate, gr. $\frac{1}{60}$;
 Nitro-glycerin, gr. $\frac{1}{200}$;
 Atropine, gr. $\frac{1}{200}$;
 Tr. digitalis, *Min.* iii;
 Oleoresin capsicum, *Min.* $\frac{3}{8}$; M.
 A tablet.

Sig.—One tablet four times a day four hours apart.

The elixir of iron, quinine and strychnine, or the aloin, strychnine, belladonna and ipecac pill may be indicated in some cases. In all cases where the craving of tobacco proves troublesome, or where there are symptoms of nervous derangement, or where the will power is deficient, or where the heart is functionally deranged, or where the patient thinks he ought to take a nervine to help him quit the narcotic, give him the bromide of sodium, cactus, pulsatilla and passiflora, as already prescribed.

THE TREATMENT OF CHOREA, WITH ESPECIAL REFERENCE TO THE USE OF QUININE.—Knapp has tried this method of treating chorea with scant success. He records his results in the *Boston Medical and Surgical Journal* of February 28, 1895, and concludes as follows: To sum up, in one case there was complete recovery in a week after treatment was begun, and in a second in three weeks; but, although this is rather a short time, it is not very remarkable for chorea to recover in that period. The third case recovered after being under treatment ten weeks. In five cases the quinine treatment proved ineffectual and arsenic was substituted, with distinct benefit in the majority of cases. With the exception of Case 1., which recovered in a week, the results are neither remarkable nor satisfactory.

During this period Dr. Wood had published the results of experiments on animals, and had been putting his hypothesis into practice, reporting his results at a meeting of the Association of American Physicians in May, 1893.

In studying canine chorea, Dr. Wood, in common with other observers, found that the movements continued after section of the spinal cord. He therefore concludes that the seat of the morbid process in chorea is in the cord. Although in chorea the motor function of the cord is somewhat impaired, he holds that the inhibitory motor function is still more impaired, that Setschenow's centres are too weak to arrest the voluntary movement so soon as its end is attained, and that in consequence the movement goes beyond the moral limits. Atropine paralyzes the inhibitory function of the cord and quinine stimulates it, and, in the first paper cited, he showed that the choreic movements in the dog were enormously increased by atropine and completely checked by quinine.

In the second paper he gives the application of these theories. In six cases of canine chorea he gives quinine, with the result that in every case the movements were inhibited, and that in four cases the dogs recovered, canine chorea being usually a fatal disease. In two cases of chorea in children he gave quinine in doses of 9 to 24 grains daily for seven and a half weeks, one case recovering and one case being greatly improved. He reported eleven other cases communicated to him by others. In nine cases (in two of which arsenic had failed) the patients recovered in from three to fifteen days, after taking 9 to 25 grains of quinine daily. In two cases quinine failed and arsenic was substituted; one of these cases did not improve at all, the other recovered.

These results are more satisfactory than the author's, but they are hardly conclusive. In a certain number of cases of chorea very good results might be obtained, probably, by removing the child from the bad hygienic surroundings in which it lives, by giving a liberal and nourishing diet, instead of the tea, candy and bread on which so many of them feed, by enforcing as absolute rest in bed as

can be obtained, and by judicious hydrotherapy, without the aid of drugs. Nevertheless, we cannot regard chorea as a self-limited disease, in spite of the recent theories as to its nature to which the author later refers, for in only too many cases the trouble is protracted and may even become chronic. He has never yet tried a purely expectant treatment, and believes that in many cases the attack is much relieved and shortened by the ordinary drugs in use, notably, of course, arsenic.

The ordinary methods of treatment will in many simple cases be followed by complete or nearly complete recovery in from four to ten weeks, and therefore the results in a part of these cases treated by quinine are no better than the results of other cases. He admits, however, that he has not seen recovery under other forms of treatment inside of a week, so that the cases collected by Dr. Wood are of more weight in supporting his theory than his own cases or the writer's.

It is not probable that the use of quinine in chorea can be justified on the hypothesis of its action in stimulating the inhibitory motor functions of the spinal cord. That quinine may be of benefit as a tonic is, of course, evident, and it may have some influence upon the toxin that produces chorea. Choreia, however, cannot be regarded as a spinal disease. The pronounced cerebral symptoms—insomnia, irritability, headache, mental failure—and the distribution of the choreic movements, which are so often found to affect one side or even one limb predominantly, would of themselves point to the cerebral origin of the disease, even without the evidence afforded by autopsies, which have shown the most marked changes in the cerebral cortex, although the basal ganglia and the cord itself have not been exempt. Choreic movements are not uncommon as a result of structural brain-disease, but they are rarely, if ever, seen as a symptom of diseases of the cord. In canine chorea, on the other hand, which is not proved to be the same as human chorea, the changes are chiefly in the cord. It is possible that in some cases, such as those reported to the American Neurological Association in 1890 by Weir Mitchell,

the morbid process may affect chiefly the cord, but such cases are rare.

It is, furthermore, possible that in the future we may differentiate several affections which are now called chorea. Huntington's chorea and the electric chorea of Dubini are now fully recognized as distinct diseases, having no connection with the ordinary chorea of childhood—Sydenham's chorea. Evidence is accumulating that in most cases of Sydenham's chorea we have to do with a disease of microbic origin, and the researches of Berkeley, Dana, and Planese have done much to confirm that belief. Other cases, including some of the rather rare cases which are alleged to be due to fright or to irritation, may be of hysterical origin. In chorea of microbic origin, the toxin probably exerts its chief influence upon the brain cortex, especially in its motor region.

The hypothesis on which quinine is recommended for the treatment of chorea seems to the writer untenable, and the therapeutic results are based thus far on too few cases to warrant us in ascribing greater virtues to this drug than to arsenic. Not having the idea at the time of publishing the results of this very imperfect trial of the drug, the results of one season's trial did not seem to the writer of sufficient value to lead him to try it in his private practice or in his subsequent terms of service at the hospital, and he went back to his former custom of supplementing the rest and regimen with full doses of arsenic, associated, if necessary, with iron or other tonics, and, in case of great motor disturbance and restlessness, with sulphonal or other sedatives.

NUCLEIN AND PROTONUCLEIN.—The first step in the direction of physiological therapy was taken when the leucocyte was found to be a perfect cell with cell-walls, nucleus, and nucleolus. This established it as a vital unit of the organism and referred its origin to the involution of germinal potentiality existing in the original impregnated ovum, and being evolved through the regular process of segmentation as are all the other elementary tissues of the organism.

The second step was taken when the leucocyte was

proved identical with the lymph-corpuscle, and even was shown to be the original corpuscle from which the so-called pus-corpuscles were formed under pathological influence.

The third step was the proof of the distributing power of the white blood-corpuscles. It is proved that the proteids formed in the digestive tract are all taken up by the leucocyte, many of them, the mono-nuclear variety, possessing but little blastema and capable of appropriating but little of tissue pabulum. It is in the multinuclear or polynuclear cells that the great change takes place, converting the proteids by mixture with the cell-blastema of the polynuclear leucocyte, under the molecular influence of the nucleus, into the assimilable tissue pabulum which we now recognize as nuclein.

When this nucleized pabulum is received by the individual tissue-cell of the several structures of the body, it is then that it passes through that remarkable metabolism or metamorphosis which makes lifeless material again vital and active in physiological function. To this, which is the form of nuclein extracted for therapeutic purposes, the name of protonuclein is given, after the analogy of Professor Huxley's protoplasm which represents the "physical basis of life."

This protonuclein is found to be not only a tissue-builder but a direct antitoxic. Indeed, experiments have proved it to be the normal antitoxin of the body, because unless there was some provision made to resist the toxic agents which are introduced every moment into the organism, we would, to use a Pauline expression, "die daily." Its phagocytic action is also clearly shown by the accompanying micro-photographs taken instantaneously—*i. e.*, in one-half second.

The practical demonstration of protonuclein power has been established in hundreds of cases already. Carcinoma, pernicious anæmia, tuberculosis, tonsillitis, cachectic fevers, diphtheria and other allied disorders of the organism have yielded to its action very promptly, to the great surprise of some of the best clinicians of the land. It has been used with great effect as a tissue-builder in the most typical

asthenia and marasmus cases. It is hard, indeed, to limit the therapeutic effect of protonuclein, as will be readily seen by observing the principle upon which its therapeutic effect is based.

In the extraction of protonuclein from the lymphoid structures of the body no chemicals are used, nothing but purely physiological methods being applied. The cellular activity is quickly observed with a one-fifth objective by mixing a drop of the blood with supernatant fluid prepared by adding one drachm of water to three grains of protonuclein. Let this stand a few minutes before adding a drop of it to the freshly drawn blood. A most beautiful physiological panorama is exhibited.

Protonuclein is prepared in tablets. Powder may also be used as directed hypodermically. It is proved to be a powerful prophylactic as well as a direct antitoxic, the latter effects extending to all zymotic diseases, It will keep indefinitely, being enveloped in benzoin and milk-sugar, preserving its potential activity just as a grain of corn is preserved by its environment.

Protonuclein is indicated in any form of disease where the organism is in a low asthenic condition, or in all zymotic or inflammatory conditions, or wherever there are toxic germs to be destroyed.—*Dr. T. O. Sommers, American Medical Association, May 10th.*

FOR THE PAINS OF ATAXIA.—The patient, a man with syphilitic history, aged 29, lay on a bed with the thighs flexed on the abdomen, so that the knees approached the chin, the legs being flexed as much as possible at the same time. A cord passed round the neck and under the knees enabled him to maintain this position for five minutes. This was repeated every night for eight days, when the pains disappeared. As they returned a month after, the same treatment was resumed for five nights. Two years have passed since then, and the man is apparently completely cured. Blondel considers this a scientific method of treatment, causing a slight elongation of the spinal cord in the same way as suspension, without any of the danger

which accompanies the latter method, and without any apparatus.—*Blondel, Rev. de Ther., April, 1895.*

METHYL-BLUE IN BRIGHT'S DISEASE.—Wishing to test the method employed by Dr. Wetchaieff in the treatment of acute nephritis, Dr. Lowenthal has employed the following in twelve cases of varied forms of acute infectious nephritis:

Methyl-blue was administered every two days in capsules containing 1-3 grain each, three doses to be taken in a day. The drug was, in general, well supported by the stomach, except in two cases in which it was taken early in the morning. It never produced pain in the epigastrium or abdomen, and caused no gastro-intestinal disturbance. There was no harmful effect upon the respiratory and circulatory systems. There was no headache, the sleep was quiet, and urination was easy and without pain.

The urine assumed a blue tint a few hours after the absorption of the first dose; the depth of the color increased rapidly and persisted, after the stoppage of the medicine, for some days. The drug augmented the diuresis, commencing after the patient had taken 5 to 8 grains.

OEdema disappeared after eight days of treatment; the ascites after ten to twenty days. The albumin in the urine diminished, and finally disappeared completely. At the same time the granular epithelial casts and red corpuscles disappeared from the urine, and finally the hyaline casts.

In cases of uræmia, the author advises the hypodermic injection of the drug.—*La Méd. Mod.*, March 9, 1895.

[As the causes of Bright's disease are so often in our observation due to over brain strain and central nerve exhaustion, toxhaemic or otherwise, involving the sympathetic system, we give this remedy place, having given it some trial and seen albumen disappear under its use. It is yet on trial with us, however. We have seen the urine cleared of its albumen, though the patient has died of some other complication, as of pulmonary stasis and heart failure.—*Editor.*]

PSYCHIATRY.

HALLUCINATIONS AMONG THE SANE.—An idea has obtained among the majority of medical men, especially those skilled in mental diseases, that auditory hallucinations indicate derangement of the mind. Medical men unskilled in the investigation of mental phenomena, usually regard the hearing of distinct vocal, and the repetition of ordinary sounds, as indicating a disturbed mental state.

The Society for Psychical Research (Proceedings part XXVI, Aug. 1894), makes a report on "the census of hallucinations," by the select committee under the chairmanship of Professor Henry Sidguick, which gives the summary of 17,000 answers collected by 410 questions.

The inquiry has been such as to include visual as well as auditory tactile hallucinations, the former being largely in the preponderance.

This report holds as a proved fact, that "between deaths and the apparitions of the dying person, a connection exists which is not due to chance alone."

This report is not the work of medical men. Mr. Myers, the only physician on the committee, died before the completion of the report; and this is unfortunate, because we should regard with great interest the verdict of medical thinkers upon some phases of this subject; not that they are or would be more acute, careful or thoughtful in investigation, but because their minds would be more or less influenced by preconceived opinions as to hallucinations, especially auditory voices and sounds—all persons known to have been in asylums were excluded, but there are many persons in the community who believe themselves sane and in good health, and are so regarded by their friends, who might be victims of insane hallucinations. The summary of the affirmative answers were, from men, 7.8, women, 12.0, the average percentage being 9.9.

Many well-known historical personages believed they heard audible voices, who were not regarded as insane by their contemporaries, and the general opinion of mankind has varied upon this subject at different eras.

Hallucinations of sight or vision may be due to some defect in the organs of perception.

Allan McLane Hamilton says:

That visual hallucinations are largely dependent upon retinal phenomena, and are often connected with ischemia or disturbed circulation at the back of the eye.

In speaking of "Auditory hallucinations," says:

They usually consist of the recognition of the sound of imaginary voices and the repetition of many ordinary sounds. A distinctly insane hallucination of hearing has nearly always valuable diagnostic significance, for the reason that it indicates a more general derangement than those of the other senses. A person may readily have such a sane hallucination as hearing an imaginary voice, as the result, possibly, of an irritation of the middle ear, but the insane individual expresses his fear of the sounds of voices speaking through the telephone, the register, or cracks in his room; or, in a more disorderly condition, it is the figures in the pictures upon the wall who are addressing him.

He also says:

Auditory hallucinations that convey no suggestion of insanity, like all other ordinary false perceptions, are nearly always immediately removed, are recurrent in the original form, and of course are not associated with other evidences of derangement.

Auditory hallucinations may occur in certain forms of hysteria and as the result of disease. This class were, so far as the committee could do, eliminated from the census; and Hamilton, before quoted, says:

The expression of hallucination of all kinds is very irregular and does not necessarily indicate insanity.—Citing the views of Lombroso and Briere de Boispont.

Acute alcoholism is attended by hallucinations, both of sight and hearing, and clearly induced by hypnotic suggestion.—*Medico-Legal Journal*.

INEBRIETY AND ALCOHOLIC INSANITY.—Seventy-first Annual Report of the Retreat for the Insane at Hartford, Conn., Dr. H. P. Stearns, Superintendent. During the years 1894 and 1895 there were received into the retreat eleven patients classified under the diagnosis of alcoholic insanity. It was further found that ninety-five patients had

been under treatment for inebriety in the preceding twenty-years. Of this number, one died, six were discharged as improved, eighteen as stationary—that is, not improved—and seventy as recovered. The opinion is expressed that in the confirmed inebriate the nutrition of the nerve-cells has become seriously impaired by the artificial over-stimulation of alcohol, so the normal physiologic functions are no longer properly performed. As a result waste products accumulate and act as autotoxic agents, inducing nutritive, functional, and structural changes in the cells themselves and the surrounding tissues. It is obvious that the affected element of the nervous system are not to be suddenly brought back into normal action by the influence or shock of any violent stimulant or poison of another character which may be introduced into the system for a few days or weeks. Of fifty-two cases admitted to the retreat during four years, with toxic insanity, eighteen were suicidal when admitted, and two committed suicide after they were prematurely removed by friends.

A MAN IN PETTICOATS.—While so much space has been given of late to the record of sexual perversion as revealed in attire and habits the following record should be considered, which is taken from the Lewiston, Maine, *Journal*:

Commander James Robbins, of the local post, G. A. R., Cooper's Mills, Lincoln County, in this State, is one of the prominent men of his community, a citizen generally esteemed as a man of integrity and intelligence. Mr. Robbins has a brilliant war record as a member of the 30th Maine. He has lived in the village since 1883, and is a jeweler. His house is a neat cottage house on the brow of the hill as one drives into the Mills. In the narrow front hallway is Mr. Robbins bench, lathe and tools, and here you will find him placidly working away at the tiny wheels and springs.

If you are on sufficiently intimate terms with Mr. Robbins you will find him indulging in his hobby. He has one, like the most of us. In his case the hobby is startlingly picturesque, and it may be safely said that he is the most

original man in the State of Maine, so far as his curious fancy is concerned. He wears petticoats. Not when he goes down street for the mail and to do his marketing. At these times he slips on the masculine pantaloons. Yet he does not wear his trousers even like ordinary masculinity. No suspenders for him. He wears a sort of dress about his hips. He always wears a woman's No. 6 shoe, with high heels and graceful, slender shape. Mr. Robbins weighs something like 180 pounds, and the effect produced by those shoes peeping coyly out from beneath manly trouser legs is startling, to say the least. Mr. Robbins doesn't mince or toddle, and his shoes seem to fit him pretty well.

He reserves his petticoats for the sanctity of the home circle, for the partial retirement of his orchard, and for calls upon neighbors with whom his acquaintance is close. Mr. Robbins isn't squeamish about showing himself in petticoats. He enjoys wearing them; he has worn them when opportunity has presented all his life long, and he wears them scientifically, too. In the first place, there's no half-way business about it. Every detail of feminine attire is there, and Mr. Robbins is rightly fussy about the details.

There is no woman in Cooper's Mills who owns so many dresses of such excellent material as does the commander of the Cooper's Mills Post. He takes pride in having only the best. His lingerie is elaborately tucked and ruffled, edged with lace and fashioned according to the most approved models of any lady's wardrobe. The material is of the finest quality, and when Mr. Robbins lifts his skirts the eye gets a vision of ruffles, lace and "all such like" of dazzling whiteness and immaculate smoothness.

He is very particular about his ironing. Everything must be starched "up to the handle," whatever that is, and sometimes Mrs. Robbins finds her hands full and her clothes horse loaded down like a pack donkey. Amazed neighbors, who were not fully aware of the extent of Mr. Robbins' hobby, have been obliged to ask for more details, when Mrs. Robbins has laconically informed them that "it is Jim's ironing." Mr. Robbins' hosiery is of the long sort

and it is currently rumored that the stockings are hitched up at the sides. His corsets he has made especially for his girth, and these he wears continually. His shape is fairly good, especially when he dresses up for afternoons. In the morning he wears print gowns, for he assists in the housework. Almost every morning Mr. Robbins in his print gown is seen sweeping off the piazza and whisking about the kitchen. He wears petticoats at home almost exclusively, putting on the garb as soon as he enters the house. For afternoon wear his gowns are elaborate. Some of them are made by Mr. Robbins and some are fashioned by local dressmakers. One cashmere dress is quite a favorite, and this is frequently worn by Mr. Robbins when he promenades in the orchard. He has lots of these good clothes, all of fashionable cut, puffed sleeves, and all the fixin's that go to lend grace and dignity. Usually he wears an apron, and especially so when at his bench. The apron is white, ordinarily, and has a bib with ruffled straps and pockets. Therefore does Mr. Robbins present a somewhat unique appearance as he works away of afternoons, or sits and converses with his wife.

Look at the gown and you see a stylishly attired woman. But the face is very manly indeed. Mr. Robbins would be marked in any crowd. His face is full and he wears a black mustache that possibly owes a color to art. His hair is long, black and curly, his voice is deep and full, and there's nothing effeminate about him except his attire.

NEURO-PATHOLOGY.

THE DIAGNOSIS AND THEORY OF MORBUS BASEDOWII (GRAVES'S DISEASE.)—Lemke (*Deutsche Medicinische Wochenschrift*) comes to the following conclusions concerning Graves's disease: (1) A patient suffers with Graves's disease as soon as delirium cordis and tremor are present. All other symptoms are consecutive and of secondary nature; they simply confirm the diagnosis. (2) The cause of Graves's disease is in all probability to be sought in a faulty chemical influence exerted on the blood by the thyroid gland.

(3) Graves's disease, therefore, is no disease of the nervous system; one requires for its diagnostication no special neurological knowledge. He believes the diseased product of the thyroid gland to be a special muscle poison, the delirium cordis being the result of this poison exerted on the heart muscle, and the tremor the result of the same poison on the skeletal muscles.—*Med. and Surg. Reporter*.

NON-INOCULABILITY OF CANCER.—Gratia and Lienaux inoculated animals with small pieces of carcinomatous tissue or the expressed fluid or scrapings with wholly negative results, whether in connective tissue, serous cavities, mammary glands, lymph glands, testes or veins, and conclude that the parasitic character of cancer is not conclusively shown, that direct or indirect contagion is not shown, except, perhaps, where especial predisposition exists. They maintain that the etiology and pathogenesis are not known.—*Bul. del Academie Roy. de Med. Belgique*.

PATHOLOGY OF INFANTILE PARALYSIS.—Dr. E. Redlich (*Wiener Klinische Wochenschrift*) contributes to this subject, the tendency of which is to support the views that in so-called acute anterior poliomyelitis the process is to be regarded, not as confined to the ganglion cells, but as an acute inflammation affecting chiefly the anterior horns of the spinal cord. The paper consists mainly in a description of the cord in a case which terminated fatally a few days after the onset of the symptoms. The patient, a child, aged five months, previously healthy, became restless, with a high temperature. On the fourth day of this illness, there was weakness of all the limbs, with loss of voice, also loss of knee-jerks, slight sensory impairment, difficulty in breathing and a transitory difficulty in swallowing. The cranial nerves, except so far as was manifested by a doubtful unilateral weakness of the face, showed no alteration. There was slight feverishness. On the ninth day of the illness there was temporary cessation of respiration, which was repeated on the tenth day, and from which the child did not recover. Examination of the spinal cord showed the presence of an acute inflammatory process affecting the cord throughout its entire length, which

did not confine itself to the anterior horns, although these were chiefly affected, but involved also the remainder of the gray matter, and even the tracts of white matter, in which there were small foci of inflammation. The changes in the anterior horns were most intense in the lumbar enlargement, less so in the cervical swelling, and least of all in the dorsal region. The ganglion cells showed the marks of acute degeneration. Outside the anterior horns, in the posterior horns, in the central substantia gelatinosa, and in a part of Clarke's column, and also in the white matter—especially the lateral and anterior tracts—there were found small areas of inflammation. In the posterior columns only one such area could be discovered. These areas in the white substance seemed to depend upon acutely inflamed vessels, and although they were in the vicinity of the anterior horns they did not appear to be connected with them. The vessels outside the cord, also, especially the artery of the anterior fissure and its branches to the anterior horns, were similarly affected with acute inflammation. Similar foci of inflammation were found in the medulla oblongata and the basal structures similarly grouped around inflamed vessels, but the cortex cerebri seemed to be free from them. The peripheral nerves, especially the phrenic and inferior laryngeal, showed very severe degeneration, and the muscles showed evidences of fatty degeneration. It is, of course, open to doubt whether this case was really one of the ordinary type of infantile paralysis. The appearances in the cord suggested the presence in the blood of some toxic material affecting the vessels, and simultaneously or secondarily the structures also of the spinal cord.

NEW DISCOVERIES IN THE NERVOUS SYSTEM—HISTOLOGICAL THEORY OF SLEEP.—Dr. Henri de Varigny, of the Museum of Natural History, Paris, states (*Popular Science News*) that Ramon y Cajal has discovered that in the nervous system the cells which make up the gray matter of convolutions and of the medulla, are not connected with each other by means of fibres running from one cell to the adjoining ones, as was most generally believed. Each cell gives out a number of fibres or roots, which diverge and

run centrifugally, but these fibres or roots do not coalesce with those of the adjoining cells, and make up continuous filaments. They meet the latter and are in contact with them, but remain distinct. Adjoining cells are in relations of contiguity instead of continuity, through their fibres. These relations do not pre-exist, but are somewhat determined by mental or nervous impulses, so that, when impulses of the same sort are frequent, the cells through which the impulses pass are enlarged, as are also the corresponding fibres, so that the passage is rendered easier. This explains in some degree the difficulty with which the first efforts to perform some new exercise—mental or physical—are attended, as well as the greater ease which follows from frequent repetition. The exact nature of the mode of transmission of the impulses from one cell to another is unknown, but the hypothesis which suggests itself upon reading Ramon y Cajal's paper is that each cell—each "neurone," as cells are called—may be considered as sort of amœba, with pseudopods of the common amœba of ditch water. When quiescent, the amœba contracts its pseudopods, and curls itself up like a ball. When active, it pushes its pseudopods out, and puts itself in contact with the pseudopods of the nearest cells or neurones. Weidersheim has observed this circumstance upon the cells of the brain of *Leptodera Hyalina*. These cells do not always offer the same form, but are constantly changing; and in the olfactory apparatus, the olfactory cells, which are of nervous structure have pseudopods which possess locomotive faculty. As to sleep; since the nervous cells are not necessarily in constant continuity, being only in contiguity, and in possibly changing continuity, it may be supposed that while agents which are known to stimulate nervous activity may act by stimulation of the pseudopods, which will be pushed further out and with more vigor, the condition of sleep is one in which the pseudopods are retracted, so that each cell is in a quiescent condition. This would be the histological theory of sleep. Some confirmation is obtained from the fact that in general paralysis a part of the pseudopods are permanently retracted, if not

in a state of atrophy. These recent investigations, and the speculations based thereupon, open new views, and the latter may be profitable. Many mental phenomena would be explainable upon this hypothesis. Fullness, for instance, would result from general inertia or laziness of the pseudopods; memory, from the ease with which the latter would push out and meet the proper adjoining pseudopods, and so on.

TUMOR OF THE CEREBELLUM, WITH BULIMIA AND RECURRENT APOPLECTIFORM SEIZURES.—Dr. J. T. Eskridge reports (*Boston Med. and Surg. Jour.*) the case of a Swedish laborer, aged twenty-six, who was under observation seven months previous to death. When first seen he was nearly comatose, vomited, and showed retraction of the cervical muscles, but there was no paralysis. The knee-jerks were equal and exaggerated. Ankle clonus, plantar, cremaster and abdominal reflexes were absent. There were choked disks and retinal hemorrhages. Two days later he regained consciousness; nausea and vomiting occurred even when no food had been taken. Later on intense craving for food, with deafness and blindness, occurred. The patient became more stuporous and had general convulsive movements. There was pronounced cyanosis of the face. The diagnosis of tumor of the cerebellum or corpora quadrigemina was made. At the autopsy a mixed sarcoma of the small, round and spindle-cell form, one and a half inches long and one inch wide, was found on the anterior portion of the middle lobe of the cerebellum. —*Int. Med. Magazine.*

CONSANGUINITY OF PARENTS IN RELATION TO IDIOCY.—Martin W. Barr, M. D., (Phila. Polyclinic) says: Consanguinity is commonly accounted a fruitful cause of idiocy, but comparative investigation shows: First, children having both mental and physical defects, the offspring of healthy unrelated parents; second, perfectly developed children with no personal peculiarities whatsoever, the issue of consanguineous marriages. This would lead us to accept the statement that consanguinity has but little, if any,

influence in the production of idiocy, unless there be some hereditary neurosis.

Heath maintains that if the blood be pure and uncontaminated there will be no bad results from such marriages.

A confirmation of this may be found in the history of the Hebrews, which gives repeated examples of consanguineous marriages where the intermingling of pure blood gives only good results, and idiocy is the exception rather than the rule.

The statistics that have been gathered by the author run thus: In 1865 the population of Batz, Brittany, numbered 3300. Five marriages took place between cousins-german, thirty-one between second cousins, and ten between those of third degree.

The issue of the cousins-german was twenty-three children, free from all disease both mental and physical. The second cousins had 120 children, normal in every respect; and the issue of the cousins of the third degree was twenty-nine children, also perfect. Two women were sterile. But insanity, idiocy, and nervous disease were unknown in this community.

Dr. Kerlin found but 7 per cent. of his cases examined directly traceable to consanguinity.

In the author's examination of 1044 idiots he found but $3\frac{1}{3}$ per cent. On the other hand, consanguineous marriages, where there is the least neurotic taint, must always be marked by deterioration of mental power. Naturally, if the taint exists in both patients, the force is but intensified, and idiots are likely to be produced with peculiarties accentuated. A notable example of this is found in Switzerland, where, among the people secluded from the outer world in mountain fastnesses, intermarriage has been going on for centuries. Here, by repeated intermarrying, neuroses are preserved intact, and idiocy ripens.

Frequently idiocy appears as the outward and visible sign of the mental deterioration of a family where intermarriage has been frequent, especially one that has been noted for its intellectual qualities, and, according to Gries-

inger, it is a mark of degeneration in a race, where blood has stagnated.—*Am. Med.-Surg. Bulletin.*

HEMORRHAGE INTO PONS SIMULATING OPIUM POISONING.—Edridge-Green (*Brit. Med. Jour.*) reports the following case: the patient was found unconscious; pupils equal and minutely contracted and insensible to light; the breathing was slow and labored; the pulse was 68, full and labored. It was impossible to rouse the patient. The pupils dilated one hour before death. The author was told that she had taken some pills for the relief of pain, as she had been suffering from gallstones.

Post-mortem revealed a large clot in the Pons Varolii. The case shows the impossibility of diagnosing some cases of hemorrhage into the Pons Varolii from opium poisoning. Subsequent inquiry showed that the pills taken did not contain opium.

HYDATID CYST OF BRAIN.—Dr. Barnes showed (Royal Academy of Medicine in Ireland, January 4th, 1895) a brain with hydatid cyst in the fourth ventricle, which had proved fatal by rupture. The cyst was the size of a large walnut, and the cavity of the fourth ventricle was systematically distended to accomodate it. It was taken from a man aged 30, who had been found insensible in the street. He lived twenty-four hours after admission, in a state of complete insensibility. At first the limbs were the seat of paroxysms of violent twitching, but towards the end they became flaccid and motionless. The temperature had risen to 107° at death. The pupils were contracted, the reflexes exaggerated, the breathing was regular throughout. Pulse rose from 72 on admission to 132 at death. Beyond occasional headache, and an epileptic seizure in October, 1893, there had been no symptoms pointing to intra-cranial disease. The fundus oculi could not be examined during life, but after death the optic discs were found to be normal.—*British Medical Journal, January 26th, 1895.*

CLINICAL NEUROLOGY.

EAR FAINTS AND EPILEPSY.—Hobby (*Annals of Ophthalmology and Otology*, October, 1895) calls attention

to the frequency with which persons affected with ear trouble faint, and manifest such peculiarities, which often distinguish the loss of consciousness in these cases from ordinary syncope, as to suggest a relationship to the minor forms of epilepsy. He thinks there must be some physiological reason why syncope should occur so often in ear cases. In ordinary syncope there is usually more or less anticipation, as pallor, sighing, etc., but in the peculiar form mentioned the patient, without warning, slides down in the chair, the eyes roll up, unconsciousness supervenes without pallor, a slight stiffening of the body follows, sometimes there is grating of the teeth, then a gentle sigh, a look of surprise, and the attack is over. Absence of pallor, of dilated pupils, of nausea before and after, presence of contractions, rigidity and the rapid recovery, make distinction between such an occurrence and ordinary syncope. These phenomena are often observed when the ear is syringed, wiped with cotton, etc., and with little reference to amount of pain suffered.—*Medical Fortnightly*.

ETIOLOGY OF VERTIGO.—Dr. Arthur A. Boyer, in a paper on this subject (*Amer. Med.-Surg. Bulletin*), reports ten cases of vertigo simulating aural vertigo (one of which, he says, is typical of what is usually diagnosticated as labyrinthine vertigo) which were permanently relieved by correcting the eye defects. Muscular insufficiency was the most frequent cause, which was overcome by tenotomy.

OCULAR HEADACHES.—Dr. F. D. Green (*The Refractionist*) concludes an article on headache as follows:

1. Many cases of headache are due to ametropia.
2. Many cases are due to heterophoria.
3. Never pronounce a case as due to ocular strain until the nose is examined.
4. Inquire into the condition of the stomach.
5. In females inquire concerning the condition of the genitals and whether there is constipation.
6. Migrane may be due to ametropia or heterophoria, but frequently is not.

A CASE OF PSEUDO-HYPERTROPHIC MUSCULAR PARALYSIS WITH THE KNEE-JERKS PRESERVED.—W. S. Colman, M. D., M. R. C. P. (*Lancet*), reports a case of this disease in a boy who, at the age of five, was first noticed to be "weak on his legs," and to have unusually large calves. At the age of ten he walked with an awkward and rather high-stepping gait and a tendency to *pes cavus*. There was commencing slight contracture of the gastrocnemii on both sides. These muscles, as well as the vasti externi, were weak, though enlarged. There was over-excitability of the muscles to stimulation by a faradic current. A current too weak to produce contraction in a healthy child at once caused a contraction in these muscles, and the reaction was greater on the left side, on which the hypertrophy was also most marked. All muscles responded normally to the constant current. When the patient was first seen the knee-jerks were extremely active, but later became more moderate, though not lost.

A CONSTANT SIGN OF COMMENCING MENINGITIS.—This consists in the inharmonious movements of the chest and diaphragm. It exists from the beginning, and may serve to reveal its cause even in insidious cases, but requires careful searching. The chest and abdomen must be bared, but not suddenly, or the hyperæsthetic skin will take on accidental movements from the action of the air.

In the first period of meningitis may be seen irregularity of rhythm and inequality of the amplitude or development of the chest. Another sign is the irregular type of respiration and dissonation of the movements of chest and diaphragm. The respiration is effected by the lower respiratory muscles of the chest. Looking at the umbilical region, instead of the normal elevation with each inspiration, there is either immobility or depression. These movements are not connected with the Cheyne-Stokes type of respiration.—*Times and Register*.

FLECHSIG METHOD IN THE TREATMENT OF INSANE EPILEPTICS.—Dr. L. Pierce Clark, in an article on this subject (*American Medico-Surgical Bulletin*), first refers to the etiology of this disease as follows: "The great import-

ance hitherto given to trauma, such as scalp wounds and the numerous falls received in early childhood, where but little or no mental disturbance immediately followed, has been over-estimated in the causation of all mental diseases, and especially in this one of epilepsy." Heredity, he believes, is the prime factor in the etiology of this disease. Epilepsy often is but one of nature's methods of demonstrating her law of the survival of the fittest, and this class is socially, morally, mentally and physically unfit to propagate the race, or to cope with its environments. To hope to benefit one of this kind would be foolish and unsuccessful.

Pathology, he continues, has yet to give us the keynote of the lesions upon which to base our treatment of idiopathic epilepsy.

The question is raised as to why insane epileptics sometimes cease having attacks, either without medication or when it has been tried in vain, leaving the patient symptomatologically a case of chronic mania or terminal dementia.

As to treatment, he believes bromides are useful in many epilepsies of early origin, undoubtedly due to some peripheral injury or visceral disturbance, but in most well-established attacks, they diminish the frequency of the attacks for a time only, after which there is marked mental reduction, more or less permanent.

He then cites and tabulates ten cases from one hundred cases committed to the Connecticut Hospital for Insane, in which a modified form of the opium-bromide treatment, devised by Flechsig, was used.

The opium was commenced with one grain three times a day until fifteen grains daily had been administered. This dose (15 grains) was continued for five days only, instead of four weeks, as Flechsig advises. On the appearance and the continuance of a copious diarrhoea and evidence of gastric irritation—evidences of its direct poisonous effects—it was thought a further continuance of the opium could be of no value, and it was withdrawn. A purgative was then given, and the next day bromide was administered

in fifteen grain doses, three times a day for the first week, increasing to thirty grains three times a day the second week, and to sixty grains the third week, after giving this amount (180 grains daily) for two weeks, all were placed on fifteen grain doses three times a day for the remainder of the treatment of four months. The trial and resultant record cover a period of ten months, in which a comparison is made as to the number of seizures in the different trial periods, viz.: with bromide, without bromide, bromide following opium and bromide with opium. All the trial cases had their diet regulated as regards vegetables and meats, and their stomach and intestinal digestion carefully looked into.

The author concludes that the results obtainable from the opium treatment do not justify its use, except in those cases where the other forms of treatment have been tried and found to be entirely inefficient.

“GRATE-SETTER’S NEUROSIS” IN A CEREBRAL NEURASTHENIC.—Reported by Edward C. Runge, M. D., St. Louis, Mo., in the *New Albany Medical Herald*. S. C., age 61, widower, grate-setter by occupation, applied at the clinic March 31, 1894. Family history was good; total abstainer from alcoholic beverages for twenty-four years; small amounts of beer during the last five years; an excessive smoker up to three months ago. Four years ago the patient’s wife died, and her loss broke his spirits and impaired his energy. Three years ago a severe attack of grippe. The subjective symptoms; general lassitude; lack of concentration; fatigue on slightest exertion; easily flushed; perspires freely and excessively; no headache, vertigo or insomnia; occasional visual dimness; ill-defined aches in lower extremities for four years, in upper extremities only lately; the soles of his feet numb at times, and often cold; general pruritus up to four months ago; appetite capricious; bowels regular; micturition and defecation normal; peculiar sudden forward jerks of both legs, most apt to occur after the patient had been sitting idle for some time, very rarely when engaged in a game, as, for instance, dominos. Sometimes the same phenomenon aroused him from his

sleep; at such times he experiences severe cramps in the calves of his legs at the slightest attempt at stretching. The legs jerked synchronously. The jerk was counterfeit of the patellar tendon reflex. He pointed to the possibility of a connection between this trouble and his occupation of grate-setter, which he has followed for over twenty-four years; he worked in the kneeling posture, frequently for ten hours at a stretch. Physical examination as follows: Patient exceedingly well preserved; general nutrition faultless; complexion good; intelligence unblurred; he answers questions readily and without hesitation. A certain degree of listlessness in walk and demeanor was noticeable at times; pupils of equal size and respond to light; viscera normal; urine shows no abnormalities. Pulse 68, full, strong, compressible. Respiration and temperature normal. No local atrophy to be found anywhere. Motility, co-ordination, muscular power perfect. Tactile, pain and muscular senses normal; perversion of the thermal sense shown in the toes of both feet, especially of the right, where hot is appreciated invariably as cold. The superficial and deep reflexes are normal, except for a slight exaggeration of both patellar reflexes.

THE NEURAL CAUSE OF CANCER.—In December, 1892, Dr. O'Sullivan read a paper before the Medical Union of Victoria in which he maintained:

1. That whatever produces chronic ill-health depresses the nervous system, and is clinically found to constitute an influence strongly predisposing to cancerous developments generally.

2. That local agencies exert only a minor influence in their direct genesis.

3. That while rapidly increasing in prevalence in civilized nations, they are almost absent amongst the savage.

4. That malignant disease is in very many instances primarily local, and due to disordered functions, as proved by the fact known to all surgeons, that the disease, when promptly removed, may never recur.

5. That benign ulcerations may become malignant; when it may be assumed the phagocytic action of the leucocytes has become subjugated by the micro-organism.

6. That disease of any kind, whether malignant or inflammatory, never occurs in an individual whose functions and nervous system are in perfect health, and who has, as a consequence, perfect local and general resistance to all pathogenic micro-organisms—in whom phagocytosis is healthily and perfectly accomplished. And here I may be allowed to say that Mr. Jonathan Hutchinson insisted that cancer is simply a modification of what occurred in chronic inflammation.

7. That when, from continued irritation, depressing influences, or advancing age, the physiological character and vitality of the animal cells become lowered, cancer finds all the conditions necessary for its growth.

8. That, in a word, cancerous disease is but one of the many proofs of over-pressure on the nervous system, which the artificial and vicious conditions of modern civilization involve.

THE DIFFERENTIAL DIAGNOSIS BETWEEN LOCALIZED NEURITIS, RHEUMATISM AND SUCH OTHER CONDITIONS AS GIVE SIMILAR SYMPTOMS.—Louis F. Bishop, in a paper before the New York Academy of Medicine (*Am. Med.-Surg. Bulletin*), says: Excluding pains due to obvious local disease, the important causes of pain are neuritis, rheumatism, gout, neuralgia, central causes, as locomotor ataxia, neurasthenia, etc., and blood conditions, due to malaria, the products of disordered digestion, and to poisons and infectious diseases.

Of the nature of pain itself we are in the dark. We can only estimate its intensity, and its quality we can only express by rough comparison. Its duration we can record with more accuracy, as also its relation to surrounding circumstances.

Neuritis.—This is a common cause of a unilateral pain in the arm or in the leg. It is characterized by its fixedness, its distribution to the territory of particular nerves, by the accompanying tenderness of the nerve trunk, absence of fever, and the pain being worse at night. In addition to this, other functions of the brain may be involved. There

may be numbness and tingling, or perhaps, loss of power in the muscles supplied by the nerve.

Rheumatism.—By the object of this paper we are excluded from the pleasure of picturing well-defined cases. In its chronic and subacute forms rheumatism does not confine itself to the fibrous structures of joints, but is prone to involve the intermuscular septa, the aponeuroses, and the muscles. We hope to extend rather than restrict the present scope of rheumatism as a cause of pain in the extremities.

Rheumatic pain is very liable to be worse at times, as it is affected by conditions of the weather. The joints are liable to show inflammatory signs, and are apt to be affected in succession. When so affected there is stiffness, especially after resting. The pain of muscular rheumatism at the outset is apt to be severe. It is affected by movements of the muscles, and its distribution corresponds to that of the muscles. Pressure on the affected part gives relief. All cases of subacute rheumatism show slight rises of temperature.

Gout.—This is suggested by indefinite stinging pain, in middle-aged people.

Neuralgia.—Neuralgia is uncommon in the extremities. The pain due to it intermits, and there is no tenderness of the nerve trunks.

Locomotor Ataxia.—This affection may be the cause of pain preceeding other symptoms of the disease. The pain is paroxysmal, and of characteristic quality. It may follow the course of nerves, or may be felt in the joints. Pressure gives relief.

Neurasthenia.—Too many pains must not be credited to neurasthenia, though it often leads to the exaggeration of pains due to accompanying anæmia, errors of digestion, etc., etc.

Blood Conditions.—Pains due to blood conditions are usually general. When due to disordered digestion they usually have a definite relation to the ingestion of food. The pains at the beginning of infectious diseases are accompanied by fever. In chronic metallic poisoning there are usually other symptoms present to aid diagnosis.

Neuritis and Rheumatism are distinguished by the pain of the former being less diffused, felt more at points, and these points being situated along the course of nerves. The pain of neuritis is worse at night. In muscular rheumatism, the muscle is primarily the seat of pain, which is much increased by passive extension, but relieved by pressure. In neuritis there is little pain on extension of the muscle, but great tenderness on pressure.

Neuritis and Neuralgia are distinguished by the more intermittent character of the pain of the latter. In neuralgia the tenderness is more general, but between the paroxysms there is not the same tenderness of the nerve trunks. In neuralgia there are no changes in the muscles.

Neuritis and Pain of Central Origin are distinguished by the usual bilateral distribution of the latter.

The character of pain, although of some importance, is not decisive. The same variety and quality of pain may arise from various causes, and in different individuals the same cause varies indefinitely in its painful effects. In questioning a structure to determine a disease, we examine for tenderness of part or whole of the structure. We test its function to ascertain whether it is impaired or carried on with pain. But structures have more than one function, and when we have indicted an organ we expect to convict by the additional evidence of the involvement of other functions. Thus, in the pain of neuritis, we expect to find usually impairment of sensation.

The best diagnosis is by exclusion. We must obtain accurate histories, because much light will be thrown upon the case by knowing whether the pain has remained stationary or not. A stationary pain is strong evidence of neuritis. The difficulty has been, not to see the resemblance between the different classes of cases, but to stipulate the points which differentiate them.

Dr. Pearce Bailey: The paper has rather omitted a consideration of the etiological factors so important for differential diagnosis. In many cases of localized neuritis a clue to the diagnosis may be obtained from a consideration of the etiology. For instance, I recall a case of complete

paralysis of the anterior tibial nerve, due to the patient holding himself in a certain position for a considerable time. The paralyzes found in tuberculosis are, I think, more often due to a condition of the cord than to a neuritis.

Dr. Bishop: I think that the peripheral origin of the paralysis in tuberculosis is shown by the tenderness on pressure over the calf muscles.

NEURO-SURGERY.

PREHISTORIC SURGERY.—Important operations were performed during the Stone Age. Some eighteen years have elapsed since Dr. Broca made known the curious fact that trephining was practiced by men in the stone age. Since that time the inquiry for the reasons for this special prehistoric surgery has, apparently, ceased. The question seems to be, Did primitive man trephine in order to prevent epileptic convulsions or to relieve the pressure on the brain when the skulls had been fractured, or did early man trephine in accordance with some mystic rites? Dr. Broca, with others, cites the cases where these skulls thus trephined were preserved, and there is the certainty that the incised portions were used as amulets. The reasons for this trephining, we are inclined to believe, were in order to create epilepsy in the individuals. If a dozen men or women were operated upon some might have suffered little inconvenience, others might have died, but then one might have lived with a confused brain. We know the high esteem in which semi-demented persons are held among savage races. Imperfect utterances, disjointed phrases, primitive men believed to be imbued with the spirit of prophecy—in fact, they manufactured their oracle or soothsayer. It was natural for savage man, with his superstition, to preserve the skull, or a portion of it, if it had belonged to such an epileptic, and so he made an amulet, cutting out that portion of the skull after the death of the individual. The subject is so curious that it is fully worthy of future discussion.—*New York Times*.

CONSERVATIVE BRAIN SURGERY.—Dr. S. V. Clevenger (*Journal American Medical Association*, June 29, 1895), in an article under this caption, thus produces and comments upon Dr. Emory Lanphear's rules for trephining for insanity, which appeared in a previous issue of the same journal:

"1. Every depressed fracture of the skull should be subjected to operation at the time of the accident, regardless of the amount of depression and irrespective of pressure symptoms."

This rule might apply to any case of obvious fracture. Insanity is rarely demonstrable immediately after a fracture of the skull.

"2. Every case of prolonged unconsciousness following a blow in the frontal region should be trephined for exploratory purposes; upon both sides, if necessary."

How long is 'prolonged?' Ordinary cerebral concussion may be attended with prolonged unconsciousness and the occipital region may be injured by a frontal blow. It might be brilliant to trephine over *contre-coup* locations. The removal of the entire skull would be thoroughly exploratory.

"3. The skull should be opened in all cases of insanity dependent upon trauma, at the earliest possible moment after development of the mental symptoms."

Symptoms usually develop in such cases many years after the injury. Should the mental part of the brain be opened up, and if so, where is it? When insanity supervenes from trauma the brain, in the vast majority of cases, has undergone permanent change without definite localization. What good would opening the skull do, aside from making a fee?

"4. Operation is justifiable in every case of serious suspicion of tumor, abscess, or softening of the frontal (or any other accessible) region."

Stet, with the exception of the word "every," which is too sweeping.

"5. Operation is advisable in every insanity following cerebral or meningeal hemorrhage in which localization is possible, the clot accessible and the mental trouble of recent development."

Such combinations are extremely rare, and there is nothing in medical or surgical literature to cause enthusiasm over trephining cases of cerebral hemorrhage. The suspicion attaches that death has been precipitated by many such operations, while expectant treatment has been rewarded by a fair number of partial recoveries. Sometimes the operation has restarted a deep-seated hemorrhage and the usual inability to differentiate cortical from basilar or subcortical and inaccessible recent ruptures of vessels make the operation exploratory, which, of itself, is adding to a trouble without reasonable certainty or assurance of benefit. The chances for aggravation by trephining outweigh the possibilities of relieving.

"6. Every case of insanity developing in the history of otitis media suppurativa deserves immediate exposure of the favorite site of cerebral abscess."

In fact, the simple operation of taking away the temporal bone or a large part of it. Exploration of the middle ear, the mastoid cells and a careful study of the case had better precede opening the temporal region. The bones may be found carious, an abscess may be evacuated in that neighborhood, but the chances are that an extensive meningo-encephalitis is the pathologic condition, in which case less harsh measures would be of more avail, and decidedly less dangerous.

"7. Trephining for the purpose of breaking up adhesions of an old meningitis has been successfully practiced though it is not to be strongly advised."

Particularly, if the meningitis is basilar or universal or even covering a large brain area. The mere matter of tearing off a few inches of cortex with the adhesions might have some attention. Certainty of a very circumscribed, easily accessible and small pachymeningitis offers chances for operating, but more study should previously be accorded the case than the rash operator indulges.

"8. Establishment of permanent drainage beneath the scalp is permissible in the beginning of a terminal dementia succeeding chronic hydrocephalus."

What earthly benefit can accrue from interfering with

the brain, or even the scalp, of a terminal dement, when the hydrocephalus is compensatory, the cerebral lobes shrunk, *atrophied*, *sclerosed*, every vestige of hope of return of reason vanished as though the head were cut off? The fluid merely fills the space between the shrunk brain and the meninges.

"9. Operation for epileptic insanity is advisable whenever there are symptoms pointing to a focal lesion."

This could apply to any Jacksonian epilepsy of cortical origin. Such instances are one in a thousand among the insane and the brain disorganization is too advanced to make it a warrantable operation. Observe the extravasations, the leucocytic exudates that have organized at the brain base, the universal heavy dense membranes and adhesions found in epileptic insane autopsies, and then, even with a focal lesion, which is not the only brain trouble, what hope is there from an operation?

"10. Experimental trephining in the early stage of general paralysis of the insane is considered worthy of further trial."

Every such experiment has been a wretched failure, beside too many cases of general paralysis of the insane (paretic dementia) have been improperly diagnosed as such. An alienist would feel like throttling an operator who cut into the skull of a maniac, whose chances of recovery are excellent, through mistaking his case for one of parietic dementia, which has been repeatedly done.

"11. Operation should be done for even a suspicion of the existence of a gummy deposit in the bone or meninges."

If gummata are in one area they are probably in another; a favorite site is about the pons and in the course of the sixth pair of nerves. The removal of a single gumma or group of gummas from one part does not check the disease. A vigorous saturation with K. I. would be all that is primarily warranted and particularly where only a "suspicion" of a gumma existed.

"12. The formation of fenestræ in the skull is permissible whenever there is evidence of intracranial pressure, even of unknown origin. "Sometimes cerebral pressure is from constipation. We have such articles as cathartics,

ergot, iodide of potassium, and a neurologist might hit upon some other means of relieving intracranial pressure, if the term intracranial is meant in the sense in which we use the word intrauterine. In another intracranial meaning, an exostosis, or what is sometimes properly called an endostosis, may produce brain pressure and the fenestra might help, or it might afford an opportunity for hernia cerebri, which is scarcely desirable."

There is something in Lannelongue's craniotomy (not craniectomy) in cases of primary synostosis to allow the brain to expand, and if surgeons would allow the alienist to select cases of idiocy and imbecility suitable for operation, instead of rushing into craniotomy with the average surgical unfamiliarity with the insanity, the percentage of successful results would undoubtedly rise. Where the brain has undergone permanent retrogradation, and of this the alienist is the best judge, there can be no hope from any treatment.

Imagine the resentment of the surgeon were some neurologist to venture advice in a case of intestinal resection, but the alienist has as good a right to feel insulted when a surgeon, who has but the most superficial ideas of psychiatry, promptly takes up his knife and trephine and proceeds to "cure" incurable dementes, imbeciles, and other comparatively brainless unfortunates, without seeking advice from those who make such matters a life study. There are vast experimental fields left over from the last century in clitoridectomy, circumcision, rectus muscle snipping for insanity, in spite of the failure of the great Chicago "orificialist" with his sphincter cutting for mental and all other troubles, including baldness and corns, and notwithstanding the controversy between the State Board of Charities and another "orificialist" who castrated a lunatic now in the Elgin Hospital for the Insane.

Castration, oophorectomy, sphincter and ocular rectus muscle cutting, clitoridectomy and other reflex pleasantries, can earn fees at less risk to the patient, just as well as brain surgery with inferior knowledge of psychiatry and cerebral pathology, even when performed by a "brilliant operator."

EDITORIAL.

[*All Unsigned Editorials are Written by the Editor.*]

Change of Address.—The editorial and business offices of this journal have been removed to our new building, No. 3857 Olive Street.

Dana's Text-Book of Nervous Diseases will be found to answer well the wants of the student in the line of neurological medicine, as the season approaches for the opening of the colleges.

Prof. Carl Ludwig, the eminent physician of Leipzig, Saxony, who recently died at the age of seventy-nine years, said among his last words, "I am satisfied with my life's work and am glad to die." He was one of the world's foremost physiologists. His researches on "The Gas of the Blood," "The Structural Conditions of the Heart, the Liver, the Kidneys, and Other Internal Organs," "The Secretion of the Kidneys," and "The Intra-Cardiac Ganglion of Ludwig," are among the things which immortalized his name in the world of physiological science.

Oscar Wilde as a Psychological and Psychiatric Study may yet prove of decided interest to the Neurologist and Psychiatrist. An intensified egoism leaning toward the morbid, and a weakening of the critical faculty are apparent in his last utterance at his late trial and sentence. He is a cultured erotic or genesic pervert. What is to become of him? The following is not the utterance of a strong and clear brain:

While the jury was out, at the request of the representative of the Associated Press, Wilde's counsel procured the following signed statement from Wilde, who was waiting in the prisoners' row below the dock:

"The charges alleged against me are entirely untrue. Youth in every form always fascinated me, because youth has naturally that temperament to which the artists try to attain. All works of art are work produced in moment of youth. I have no sense at all of social grades. I love society and the rich and well born on account of their luxury, culture, the graces of their lives, the external accidents of comely life. But any one, plow boy,

fisherman or street arab has an interest for me. Mere humanity is so wonderful. I do not ask of the young what they do. I do not care what they are. Their ignorance has its mode of wisdom. their lack of culture leaves them opened to fresh and vivid impressions."

(Signed).

"OSCAR WILDE."

The document from which the above statement is cabled is written throughout in Wilde's own writing, which is extremely graceful and firm, on a sheet of foolscap paper, and it is signed with a flourish.

American Neurological Association.—The Twenty-first annual meeting of this association was held at Boston, June 5th, 6th and 7th, 1895. After the address of the president, Dr. Philip Coombs Knapp, of Boston, the following scientific program was presented:

"Hysterical Amblyopia and Amaurosis" by Dr. J. Arthur Booth; "Complete Hysterical Anæsthesia in the Male," Dr. Geo. J. Preston; "Railway Spine," Dr. F. X. Dercum; "Lantern Exhibition of Photo-Micrographis of Nervous Histology, Golgi Stains," by Dr. M. Allen Starr; "Lantern Exhibition of the Medulla Oblongata of a Chimpanzee, with other Specimens," Dr. Edward Wyllys Taylor; "Exhibition of the Brain of a Chimpanzee," Dr. Thomas Dwight; "Inhibition in the Physiology of Respiration," Dr. William Townsend Porter; "The Pulse in Insanity," Dr. Theo. H. Kellogg; "Localization of Lesions in the Pons," Dr. Charles K. Mills; "Hyperostosis Cranii," Dr. James J. Putnam; "Cortical Localization in the Light of Recent Researches into the Minute Anatomy of the Cortex," Dr. Charles K. Mills; "Tumor of Cerebellum with Autopsy," Dr. E. D. Fisher; "Cases of Brain Tumor," Dr. G. J. Preston; "Brain Tumor," Dr. G. L. Walton; "Injury of the Angular Gyrus from Fracture of the Skull," Dr. C. Eugene Riggs; "Hereditary Chorea with Autopsy," Dr. Charles L. Dana; "Insanity and Phthisis, their Transmutation, Concurrence and Coexistence," Dr. H. A. Tomlinson; "The Diagnosis of Pachy-meningitis Interna Hemorrhagica," Dr. William N. Bullard; "Tabes and Multiple Sclerosis," Dr. E. W. Taylor; "Pathology and Morbid Anatomy of Amyotropic Lateral Sclerosis," Dr. Joseph Collins; "Peroneal Muscular Atrophy with Autopsy," Dr. William C. Krauss; "Writer's Cramp," Dr. J. W. Putnam; "Automimesis," Dr. Smith Baker; "Obstetrical Paralysis," Dr. G. L. Walton.

The following papers were read by title: "The Dual Action of the Brain," by Dr. Samuel B. Lyon; "Fissural Studies of the Brain of Two Philosophers, by Dr. Burt G. Wilder; "Home Treatment of Insanity," Dr. H. M. Bannister; "An Operative Procedure for the Relief of Basilar

Meningitis Limited to the Posterior Fossa," Dr. J. T. Eskridge; "Pseudo-Neurasthenia," Dr. Morton Prince; "The Association of Tabes and Paretic Dementia," Dr. Theodore Diller; "Case of Multiple Neuritis in an Infant," Dr. Graeme M. Hammond; "The Conservative Value of the Play Impulse," Dr. Irving C. Rosse; "Must Acute Paranoia be Admitted into our Nomenclature," Dr. William Noyes; "Telegraphers' Paralysis," Dr. James Hendric Lloyd.

The following officers were elected: President, Dr. F. X. Dercum, of Philadelphia; Vice-Presidents, Dr. George J. Preston, of Baltimore, and Dr. C. E. Riggs, of St. Paul; Secretary and Treasurer, Dr. G. M. Hammond, of New York City.

Medicine is a new journal of Medicine and Surgery under the able editorial management of Dr. Harold N. Moyer, of Chicago. Geo. S. Davis, of Detroit, is the well-known publisher.

Its capable editorial staff and corps of able contributors are ample guarantee of success, and justify its expectation of professional support. The first issue contains articles by the following well-known writers, viz.: W. L. Baum, D. A. K. Steele, H. A. Hare, G. Frank Lydston, W. S. Christopher, and S. S. Bishop. We are glad to welcome *Medicine* to our list of exchanges.

Mississippi Valley Medical Association.—The Twenty-first Annual Meeting of this Association will occur in Detroit, Mich., September 3, 4, 5 and 6, 1895. This Association is one of the most prosperous medical bodies in the United States. The membership increases annually, and its scientific work is far above mediocrity. It is now ovigorous of the American Medical Association in membership and ability, and next in numbers.

The Dual Brain.—The *Journal of the American Medical Association* thus discourses:

The theory of duality of the brain as maintained by Holland and Wigan, and later by Brown-Sequard and others, is one in regard to which most physicians probably hold themselves uncommitted, as they are hardly ready to admit it as proved that the two hemispheres can act to any considerable extent independently of each other. Clinical observations such as would be of value in determining whether such independent action is possible are rare, and those that seem to point that way have generally been more or less incomplete or unsatisfactory. A recent observation by Dr. L. C. Bruce (*Brain*,

spring, 1895), is therefore of special interest, as it comes from one who may be presumed to be a competent observer, and it is published in one of the highest grade medical periodicals of our time.

The patient was under observation continuously for three months up to the time of the report. In one stage he was demented, left-handed and talked only Welsh and gibberish; in the other he was fairly intelligent, but maniacally mischievous, right-handed and talked English, but understood and could converse also in Welsh. In an intermediate condition he was ambidextrous, and spoke a mixture of Welsh and English. In the English stage he remembered nothing of the Welsh stage, but had a perfect recollection of anything that had occurred in his previous English stages. His circulation and his bodily conditions generally were good in this phase, while in his demented state his mental and physical conditions were exactly the reverse. In his maniacal condition he wrote legibly with his right hand and produced mirror writing with his left; the specimens obtained with difficulty during the demented condition were illegible but were written with the left hand, from left to right. Thinking that the transition from one stage to another might be due to circulatory changes, Dr. Bruce took sphygmographic tracings in both conditions; in the maniacal or English stage the tracing revealed a full pulse of high tension, while in the other it had lower tension and less volume. Attempts were made to produce the two different stages artificially, but without success.

We have apparently in this observation, as Dr. Bruce remarks, a case of right hemispheric melancholia or dementia and of left hemispheric mania, occurring probably in an individual whose cerebral hemispheres acted more or less independently prior to the advent of the mental disorder or disorders, if we can assume the existence of such a condition. Or, as he suggests, only one lobe of the cerebrum, the left, is educated, and takes the greater part in mental action; the right functioning mainly in motion, sensation, etc., and playing but a very small part in intellection, would naturally show its derangement rather by the symptoms of dementia than those of mental exaltation.

It seems possible, moreover, that this condition of independent action of the hemispheres may be only exceptional, and that ordinarily, either originally or through education they always act together and share the same functions. It will be noted that in this case, though Dr. Bruce does not remark it, speech, which is generally regarded as a function of the speech center in the left hemisphere, was not

altogether lost in this patient but was limited to Welsh, his native tongue. This, as far as it goes, would indicate that the left brain was not altogether inactive or that there were bilateral speech centers, the former being perhaps the most probable of the two alternatives.

The case is an interesting one, not only as regards its bearing on the question of the duality of the brain, but also as suggesting possibilities from the study of the cases of circular insanity in our asylums generally. It may be that a closer observation of such patients would reveal other more or less similar instances, in which a marked predominance of one or the other cerebral hemisphere might be seen in the different phases of the disorder. In such a way, it may be, alienists have a special field of physiologic and psychologic research that has been heretofore too little cultivated.

[To the above, much clinical testimony, may be added some of which may be found in a contribution of our own on the dual action and vicarious functions many years ago, and the many clinical records of alternate automatisms, and in that literary fiction founded on fact, of Dr. Jekyll and Mr. Hyde. You are on the right road Dr. Hamilton, and Wigan and Brown-Sequard were not far wrong.—*Editor.*]

Purity of Peacock's Bromides.—Messrs. Helbing and Passmore, the great English chemists, have pronounced Peacock's Bromides a preparation of chemically pure bromides and far superior to the commercial salts.

A Preliminary Course in Liberal Arts for Doctors.—At the recent Massachusetts Medical Society dinner, Professor Charles Eliot Norton said an especially good thing worth oft repeating on the value and necessity of general culture to medical men, and the ALIENIST AND NEUROLOGIST heartily joins the *Boston Medical and Surgical Journal* in giving this important subject further circulation and endorsement. "The requirements," says our esteemed Boston contemporary, "of modern medicine, nay, even of a single specialty, are so exacting, and even the most seemingly limited field is so wide in its important relations, that the conscientious student feels that all his time is not enough even for its mastery, and an imperfect mastery at that. All his time he must give; unceasing work day and night would not be enough. He devotes himself to his task with dogged persistence, works year in and year out to utter weariness, becomes narrow and crabbed, requires a kind of mental wry-neck from looking

at life from the single vantage-point of his chosen specialty, talks and thinks only of his chosen work until he is capable of nothing else. Perhaps when his life draws to a close he may be satisfied with himself, perhaps not. But sooner or later he is brought into contrast with another worker in the same field. He has worked hard and late at night also, and his work has been done with enthusiasm and at high pressure; but instead of giving all of his time to it he has found a little each day for rest and healthy recreation, a little to give to his duties as a citizen, and a little to music, to good literature, to history, to philosophy, to the study of life in its wider aspects. When he returns from his relaxation to his medical work he comes to it with a vim, and snap, and energy born of his relaxation; his views are more comprehensive and human; he sees things in their broader relations. At the end of the same number of years he has probably a firmer grasp of his special subject than his brother who has done nothing but follow his single bent.

“So wide and far-reaching are the relations of medicine to science, to literature, to art, to human life, that we may truly say, the broader the culture of the man, the better physician will he make. The training and discipline of a course in science or the liberal arts will, beside furnishing a man with an avocation, equip him with the ability to do greater and better work in his medical studies.

“It is well recognized that in this country we have more doctors than the community needs, more than can make an honest living by the practice of medicine. Our medical schools, however, are each year more crowded, and larger classes are turned loose upon the community. The stress of competition and pressure of want drives some each year to the adoption of what is called low standards, that is, in plain language, to professional dishonesty and quackery, either open or overt. We have too many doctors. We want better doctors and less of them.

“Now, how shall the standard be raised? In the first place, would it be raised by restricting the admission of candidates to the graduates of colleges or the higher scientific or technical schools, or men who could show evidence of having done a commensurate amount of work under private tutorship? Certainly it would. The men who lead the classes and do the hard work in our medical schools are now, with few exceptions, the graduates of colleges and scientific schools; and the leaders in the medical science and practice are recruited with striking uniformity from the men of liberal education.

"The requirement of a liberal education, then, for admission to a medical school would tend to decrease the number of medical candidates and to raise the average standard of ability in the school and the profession.

"We have a right, then, to ask why such action is not at once taken by the faculties of our medical schools. The answer is, that it has not been done for two reasons: first, that the students if required to finish a course in the liberal arts would be so old in beginning their long course of medical study that they could not qualify for practice before the age of twenty-seven or twenty-eight, and, second, that the medical schools are dependent on the tuition fees for their actual running expenses, and could not therefore afford to take action which would reduce the size of their classes.

"With regard to the first objection, we can only say that if hard, earnest work were made a requisite for graduation at our colleges and preparatory schools, and their standards were not lowered so as to allow men to pass whose degree represents only a minimum of work, and means nothing to any one except to their parents—proud in the liberal education of their progeny—the degree in the liberal arts could be easily secured at an average age at least two years younger. Many of the brighter men in our colleges do two years' work in one, and secure early graduation. And that, we notice, without seriously injuring their health. It is keeping the brighter men back to the pace of the loafers and dunces which makes the average age at graduation so high.

"With regard to the second objection, namely, poverty of the schools, we can only say the more true the greater pity. That our best medical schools should be forced to sacrifice the best interest of the profession they educate in order to maintain their own existence is truly a shameful compromise. The need of endowments for our schools is a crying one. If some of the money spent in founding new medical schools were put in the form of endowments for old ones, it were far better spent.

"If the rich men of to-day could be made to realize the great importance of this matter, and to understand that unless they endow the medical schools their descendants will be likely to fall into the hands of inferior physicians, our schools might be placed above this shameful necessity."

[The tone, quality and culture of the coming doctor is in our own hands. He may be "a somebody" or a nobody among men as we ourselves make him, and the world needs high-minded men of culture for its physicians.—*Editor.*]

Training Schools in Hospitals for Insane.—

The reception of an invitation to be present at the Commencement Exercises of the Training School for Attendants, at the Amusement Hall of the State Hospital at Danville, Penn., Thursday, July 11th, 1895, at 7:30 P. M., calls our mind to the fact that some of our hospitals are doing good work in this direction and reminds us that the Danville Hospital is one of the pioneers, if not the pioneer.

The Programme of Papers, Discussions, and Demonstrations of the July meeting of the British Medico-Psychological Association, included the following:

Dr. Rivers—"Experimental Psychology in Relation to Insanity," illustrated by apparatus for measuring association time, etc.; Dr. Hughes (St. Louis)—"A Practical American Method of Imparting Topo-Cerebral Anatomy in Connection with the *locus morbi* of Cerebral Diseases;" Drs. Clouston and Batty Tuke opened a discussion on "Rest and Exercise in the Treatment of Nervous and Mental Diseases;" Dr. W. F. Robertson—"Microscopic Demonstration on the Pathology of Milkiness, Thickening and Opacity of the Pia-Arachnoid in the Insane," accompanied by a paper; Dr. Jules Morel—Paper; Dr. J. F. Sutherland—"The most Common, though least Recognized and Admitted, form of Mania from a Medico-Legal Aspect;" Dr. Turnbull—"Some remarks on the Forcible Feeding of Insane Patients;" Dr. Shuttleworth—"Provision for Pauper Idiots and Imbeciles;" Dr. L. C. Bruce—"Thyroid Feeding;" Dr. Dawson—"A very rare Case of Ecchymosis following Insane Excitement."

Dr. David Ferrier was made an honorary member. Dr. Emil Wilhelm Lindell, of Gothenberg, Sweden, was elected corresponding member.

The following Candidates were elected as Ordinary Members: Frederick William Eurich, M. B., C. M. Edin., Pathologist, County Asylum, Whittingham, Preston; Frederick Eastes, M. D. Durh., M. R. C. P., Honorary Medical Officer, Victoria Hospital, Folkestone, 4 London Street, Folkestone.

The Presidential Address was delivered by David Nicolson, M. D., on "Crime, Criminals and Criminal Lunatics."

The Association visited the State Criminal Lunatic Asylum, at Broadmoor, on Saturday, July 27th, by invitation of the President. Luncheon was provided.

The Annual Dinner was held at the Whitehall Rooms of the Hotel Metropole, at 7:30 P. M., on Friday, July 26th. Several distinguished guests were present.

On Monday, July 29th, there was an excursion to the Holloway Sanatorium, Virginia Water, with luncheon.

Dr. Hughes' contribution was not presented because of his failure to get over in time, much to his regret. The meeting was a good one, both in its scientific and in its social features. This time-honored Association, with its many distinguished members is doing great work in psychiatry.

American Medico-Psychological Association.—

The Fifty-first Annual Meeting of the American Medico-Psychological Association was held at Denver, Colorado, June 11th, 12th, 13th, 14th, 1895.

The following contributed to the scientific program:—Address of President, Dr. Edward Cowles, Subject, "The Advancement of Psychiatry;" "The Medical Work in the Wards of Hospitals for the Insane," P. M. Wise, M. D.; "The Organization of the Medical Work in the St. Peter State Hospital," H. A. Tomlinson, M. D.; "Scientific Diets for Hospitals," Clarke Gapen, M. D.; "The New York Hospital and Asylum Dietary," Charles W. Pilgrim, M. D.; "Hospital Diets," J. D. Munson, M. D.; "The Cure of Inebriety by Specific Treatment," B. D. Evans, M. D.; "The Relation of Alcoholic Indulgence to Insanity," G. Alder Blumer, M. D., and H. M. Bannister, M. D.; "The Histological Pathology of Chronic Alcoholism." Part I—"Experimental Study of the Effects of Alcohol on the Cortex of Rabbits," H. J. Berkley, M. D.; (a) "Pseudoporencephaly with Remarkable Secondary Degenerations," (b) "Demonstration of Cortex and Spinal Cord in General Paresis," (c) "Demonstration of the Cortex in Senile Dementia, with Peculiar Changes," (d) "Demonstration of Senile Tumors in the Cortex of a General Paralytic," Adolf Meyer, M. D.; "Fragillitas Ossium" (illustrated by a case), H. E. Eyman, M. D.; "State Care and State Maintenance for the Dependent Insane. What it has Accomplished in New York." Carlos F. MacDonald, M. D.; "Concealed Delusions," B. D. Eastman, M. D.; "A Few Canadian Cases in Criminal Courts, in which the Plea of Insanity was Presented," Daniel Clark, M. D.; "Pelvic Disease and Insanity," Geo. H. Rohe, M. D.; "The Relation of Acute, Active Cerebral Hyperæmia to Insanity," Frank P. Norbury, M. D.; "The Significance of Motor Disturbances in Insanity," A. B. Richardson, M. D.; "Thyroid Feeding in Certain Forms of Mental Trouble," C. K. Clarke, M. D.; "The Use of Thyroid Extract in Insanity," E. N. Brush, M. D.

The following volunteer papers were read:—"Memorial

of Dr. F. T. Fuller," P. L. Murphy, M. D.; "Memorial of Dr. E. E. Duquet," T. J. W. Burgess, M. D.; "Memorial of Dr. Geo. C. Palmer," C. B. Burr, M. D.; "Memorial of Dr. M. D. Field," W. D. Granger, M. D.

The following officers were elected for the ensuing year: President, Dr. Richard Dewey, Illinois; Vice-President, Dr. T. O. Powers, Georgia; Secretary and Treasurer, Dr. Henry M. Hurd, of Maryland.

Hack Tuke Memorial.—The great respect in which the late Dr. D. Hack Tuke was held by all who knew him has led to a very generally expressed desire that his memory should be perpetuated in connection with the great work to which he devoted his life, viz., the amelioration of the condition of the insane, and the progress of neurological and psychological medicine.

With the view of carrying out this object, an influential and representative Committee of the British Medico-Psychological Association has been appointed, and they are of opinion that the Memorial should take the form of a prize or medal to be awarded as an encouragement to the study of the above-mentioned subjects.

The Committee appeal to all those who desire to honor the memory of Dr. Tuke and to promote his life's work, for subscriptions to carry out this object.

The subscriptions may be sent to the Honorary Treasurer, Henry Rayner, M. D.

The names of the Committee which follow give ample warrant that subscriptions will be properly placed: Chairman, *G. F. Blandford, M. D. Members of Committee, Sir Russell Reynolds, Bart., Sir Joseph Lister, Bart., Sir J. C. Bucknill, Sir B. W. Richardson, Sir H. Pitman, E. Long Fox, M. D., Colonel Lambert, Henry Tuke Mennell, Esq., *Jonathan Hutchinson, F. R. S., J. Hughlings Jackson, M. D., *G. H. Savage, M. D., G. W. Mould, M. R. C. S., W. Orange, M. D., *T. L. Rogers, M. D., J. E. M. Finch, M. D., A. D. O'C. Finegan, L. R. C. P. I., B. Boonville Fox, M. D., J. R. Gasquet, M. D., E. Goodall, M. D., J. C. Howden, M. D., *D. Ferrier, M. D., C. A. Lockhard Robertson, M. D., F. Needham, M. D., J. Sibbald, M. D., J. Fraser, M. B., E. M. Courtenay, M. B., *Conolly Norman, F. R. C. P. I., *D. Nicolson, M. D., *J. H. Paul, M. D., J. Murray Lindsay, M. D., *H. Hayes Newington, M. R. C. P. E., *T. S. Clouston, M. D., D. Yellowlees, M. D., A. R. Urquhart, M. D., Oscar T. Woods, M. D., *T. Outtersson Wood, M. D., *E. B. Whitcombe, M. R. C. S., J. Batty Tuke, M. D., C. A. Mercier, M. B., E. W. White, M. B., J. Chambers, M. D.,

W. J. Mickle, M. D., R. Baker, M. D., D. Bower, M. D., J. Rutherford, M. D., J. L. H. Langdon-Down, M. D., P. W. Macdonald, M. D., T. W. Macdowall, M. D., R. H. H. Sankey, M. R. C. S., R. Semelaigne, M. D., M. J. Morel, M. D., Professor Benedikt, G. E. Shuttleworth, M. D., R. Percy Smith, M. D., J. B. Spence, M. D., H. Sutherland, M. D., T. A. Chapman, M. D., E. M. Cooke, M. B., E. Powell, M. R. C. S., J. Rorie, M. D., H. Stilwell, M. D., J. P. Richards, M. R. C. S., S. R. Philipps, M. D., L. A. Weatherly, M. D., J. Wigelsworth, M. D., J. Bywater Ward, M. D., W. B. Tate, M. D.

Honorary Treasurer, *Henry Rayner, M. D., 2 Harley Street, London, W. Honorary Secretary, *Fletcher Beach, M. B., 64 Welbeck Street, London, W. The names of those marked with an asterisk (*) are members of the Executive Committee.

The Hypnotized Musical Prodigy of Du Maurier.—The Svengalized "Trilby" of Du Maurier's popular novel has been the subject of much discussion and more skepticism than often follows or attaches to this popular novelist's heroes, heroines, plots or themes. Such vocalists as Trilby under hypnotic influence are, in our judgment and observation, possibilities, and having so expressed ourself publicly on an occasion when Svengali's hypnotized vocal prodigy was a part of the theme of discussion, we take pleasure in producing from "mouth of wisest censure," the *Boston Medical and Surgical Journal*, an interesting editorial on the subject of "Alleged Exaltation of Faculty in Second States."

In that popular novel, "Trilby," the principal interest centers in a remarkable phenomena of hypnotism. The heroine of the story when in her normal state is an indifferent singer; has, indeed, a fine voice, but no ear; in fact, can hardly tell one note from another. When in the hypnotic state and under the training and "suggestive" promptings of her tutor—when, as the daily contemporaries would put it, she has been Svengalized—she has both "ear" and "voice," becomes an accomplished and popular vocalist, and obtains wide celebrity. When in the natural state, she forgets her songs—words and musical expression—her notes are discordant and the break-down is complete.

This, the capital part of the story, has been pronounced improbable and absurd. It is improbable; but there is something to be said in its defense. It is not wholly absurd, though no historical occurrence of the kind may be on record. That in some well-attested cases there is a won-

derful exaltation of faculty under hypnotic influence and in "second states" (*dedoublement de la personnalite*) seems undeniable. Instances may be cited from Ribot, Charcot, Janet, and many others. It is not contended that hypnosis ever imparts new faculties or acquisitions; at the most it can only—in perhaps exceptional cases—heighten such as already exist. If Trilby had possessed no voice or "ear" for music (delicate appreciation of musical tones) when she came under the spell of Svengali's baton, the hypnotic state could not have made her a singer, able to entrance audiences.

Binet and Fere dispute the assertion so often made that a somnambulist is an unconscious automaton—a puppet moving only as its strings are pulled—and allege examples of subjects who, during the hypnotic state, could perform intellectual feats of which they were incapable in the waking state. Even natural dreaming is at times accompanied by exaltation of faculty, the mathematicians in their dreams have solved problems to which they had devoted the fruitless study of many days. Thus, Condorcet saw in his dreams the final steps of a difficult calculation which had long puzzled him; and many think that Coleridge's "Kubla-Khan," composed during sleep, may be ranked among his best efforts. The phenomena of the revival of supposed extinct memories during the delirium of fever is sufficiently well known.

Pierre Janet, who believes in the essential identity of hypnotic somnambulism and states of double personality not brought about by hypnotic influence, relates some remarkable instances of complete recovery in somnambulism of sensibilities (many of these patients were anesthetic, anosmic, etc.) and of memories which seemed to be lost. Lucie and Leonie, Marie and Rose regain under hypnosis their lost senses and their memories. "If," says Janet, "somnambulism is a second existence, it is not necessarily a feeble existence without spontaneity, independence, and originality."

The case of Marguerite D. related at length by Georges Guinon in Charcot's "Clinique" is an instance of heightened activity and heightened intelligence during the somnambulatory state. Marie H., an inmate of the Salpêtrière, in her normal state does not know how to read or write or count. Can do coarse sewing and stitching, but cannot embroider, do lace work, or crochet work. In the second, or "vigilambulatory" state, she can read and write and count, do crochet work and embroider—acquisitions taught her since she came

to the Salpetriere and in the "second state," which is her better state.

As concerns the fact that the acquisitions made in the state of vigilambulism are dormant—not manifest—in the ordinary waking state, Guinon observes that this may be because the notions acquired in the second state are less profoundly implanted than those of the normal state, but a perfectly satisfactory explanation is wanting.

Ladame describes an entire change of personality in a patient of his, of which a report appears in the *Annales de la Societe Medico Psychologique*, January, 1888. In the second state the patient was more active and alert than when in the normal state; she was also free from anesthesia and other hysterical stigmata which characterized the normal states. When in the latter state she always lost at a game of cards, while in the second personality she invariably won.

In the patient of Bonamaison, an hysterical female, related in Charcot's "Clinique," the mental faculties were more exalted in the second state than in the first. "The expression of the countenance is different. The eyes are more brilliant, the manner more engaging; she converses and laughs with more animation. Very docile in the normal state, she becomes in the second state wilful and capricious. In this state she can do the finest needle-work and embroidery with a dexterity utterly foreign to the normal condition. The intelligence and memory are in fact exalted. She remembers multitudes of facts which are quite forgotten in the normal state. I have often heard her sing when in the somnambulant state an English ditty learned in her childhood and of which she does not know the first word when in her normal state." Guinon regards this as a case of double personality (*dedoublement de la personnalite*) of hysterical nature.

Dufay's patient in the somnambulant state is much more active, and her senses seem endowed with extra-ordinary hyperacuteness. "She looks for and finds objects in full darkness. She threads a needle in the dark, and with her hands under the table. She talks fluently while working, but somewhat after the manner of children, using *me* for *I*. 'Quand moi est bete' (when I am in the brute state) signifies 'when I am not in somnambulism.'"

There are a few other cases of a similar kind on record, as those of Azam, Camuset, and Verriest. These phenomena of double personality are almost always connected with hysteria. Without venturing here any interpretation

of these singular psychological phenomena (a work very well done by Pierrie Janet in his last treatise, "Accidents Mentaux des Hysteriques"), we may refer to one more instance of heightened intellect—during the second state—the patient M., of Jules Janet, at the Hopital Pitie, who was reduced to the last extremity by a prolonged attack of gastric hysteria. There was general anesthesia and the limbs were in a state of partial catalepsy; there was retention of urine by spasm of the sphincter. When brought into the hypnotic state, all these infirmities disappeared. Appetite, digestion, strength returned, and the patient seemed entirely well, only to fall back into her anesthesia and other morbid states when she came out of the hypnotic state. It was found necessary to keep her in a condition of induced somnambulism. This was done by the Janets for a space of five years. During this period she pursued successfully a course of professional study and passed difficult examinations. When she is in the first state she forgets a large part of these acquisitions, and the five years she has passed seems a blank. The induced somnambulism has become to this patient a second existence far more complete than the first.

[The above record might be enlarged from the pages of Abercrombie's "Intellectual Philosophy and Rational History of Hallucinations" and Dendy's "Philosophy of Mystery."]

The Ninth Annual Meeting of the American Orthopedic Association will be held at Chicago, Sept. 17, 18 and 19, 1895. The officers of the Association are: President, John Ridlon, M. D.; 1st Vice-President, Bernard Bartow, M. D.; 2nd Vice-President, Louis A. Weigel, M. D.; Treasurer, E. G. Brackett, M. D.; Secretary, Royal Whitman, M. D.

A Centenarian.—Dr. De Bossy, aged 102 years, is in active practice in London.

Poeta Redivivus.—The *Columbus Medical Journal* has rescued from oblivion a medical poet of St. Louis, whose humor and philosophy in physical adverstity are worthy of imitation by all similarly distressed, and the *Detroit Medical Age* comes gallantly to the rescue of our city, as the historic home of this philosopher in affliction. There are not many similarly afflicted in our good city, but when such affliction falls upon them, the poet portrays how they bear their trials with fortitude and fun, aiding the physician with the true spirit of buoyancy and resignation, standing up manfully as becomes a true St. Louisan under trial.

In the early fifties a patient, while waiting in the office of the late Doctor Pope, of St. Louis, gave vent to his feelings by scribbling the following on a convenient blotter:

When sorrow's cloud is cast athwart
 The sunshine of my mind,
 When I, with gloomy care distraught,
 No recreation find;
 When sighing o'er my helpless lot,
 And what I used to be,
 I'll seek some quiet tranquil spot
 And pass a small bougie.

Let strictures on my conduct pass;
 Unnoticed let them be;
 A stricture somewhere else, alas!
 Is more deplored by me.
 In hope this blight on manhood's bloom
 I yet effaced may see,
 I'll hie me to my quiet room
 And pass a small bougie.

This the *Columbus Medical Journal* recently rescued from almost oblivion, accrediting to "Erichsen's Rhymes." It, however, originally appeared in the *Peninsular Medical Journal* of Detroit, when that journal was under the editorial guidance of the late Moses Gunn, and was subsequently copied in the *Boston Medical and Surgical Journal*. The *Peninsular Journal* died in 1859, though another periodical of the same name was published for a brief period at Ann Arbor.

The British Medical Association held its Annual Meeting in London, July 30th to August 2nd, 1895.

Many of distinguished foreign physicians were in attendance through invitation of the Executive Committee of the Council of the Association. It was a socially enjoyable and professionally profitable meeting. The bonds of professional and social unity between the profession of America and the mother country (which should never have been severed), are growing closer every year. The American and English profession are destined, as these peoples are in purpose of civilization, to become practically one again.

Portraits of Professional Celebrities of the Past continue to appear in the *Brooklyn Medical Journal* as they have for the past several years and prove one of its most entertaining, though not the only one of its many

attractive, features. An especial debt of gratitude is due from the profession to the management, as well as to the accomplished editorial staff, of this ably conducted medical monthly for this splendidly distinguishing and attractive feature of the *Brooklyn Medical Journal*,

Reappointment of Dr. Carlos F. Macdonald, as State Commissioner in Lunacy.—It is gratifying to see such general commendation by the press of the appointment of a State Commissioner in Lunacy. Dr. Macdonald is in a position to do great good to the interest of the insane and humanity in the State of New York, and his ability and experience with the needs of the insane are such that the interests of psychiatry ought to be greatly promoted by this excellent appointment. We hope and presume this appointment will meet with the general approbation of the medical, as it has of the popular, press. A Commissioner in Lunacy may greatly advance or retard the progress of practical psychiatry in a state. We look for great advance in the lines of progressive psychological science through this re-appointment. Dr. Macdonald was himself once a medical superintendent of a hospital for the insane and also for inebriety, and knows by personal observations the needs of these institutions and the trials of their chief physicians.

The American Electro-Therapeutic Association.—The American Electro-Therapeutic Association will hold its Fifth Annual Meeting, at the College of Physicians and Surgeons, of Ontario, in Toronto, Canada, on Tuesday, Wednesday and Thursday, September 3rd, 4th and 5th, 1895. Dr. Emil Heuel, Secretary, 352 Willis Avenue, New York City, U. S. A.

Post Oophorectomic Mental Aberration.—The following letter explains itself:

DR. HUGHES.

———— MO., June 4th, 1895.

Dear Sir:—In a case of unequilibrated nerve forces, following the removal of both ovaries, a case where the mental faculties are becoming clouded, would you accept the case for treatment by mail, or shall the woman be brought to you? She is a mother, thirty-two years of age, and was operated on fourteen months ago. Yours Very Truly,

S. H. M.

These post-operative mental effects are quite frequent. We would learn of more if all cases survived and correct psychiatric diagnosis were made.—*Editor*.

Silver and Bacteria.—Dr. Welch, the bacteriologist for Johns Hopkins Hospital, has demonstrated that germs will not grow in the immediate vicinity of silver. A sterilized silver wire was introduced into a culture, and while the colonies grew as usual elsewhere, immediately about the wire was free from them. Drs. Halsted and Kelly are making use of this discovery by using silver foil in the dressing of aseptic surgical wounds. The foil is placed immediately in contact with the closed incision in sheets about four inches square, and then the other aseptic dressings are applied.—*College and Clinical Record*.

Here is another argument for the free silver men. Politics must come to science for its strong arguments for free coinage. A scientific argument for free silver. Politics, like religion, finds its strong points in science. There is one baccillus, however, that does flee from silver. It is the baccillus of boodle, and its congenial breeding soil is the political spoils system. He that successfully sorts out and destroys the lair of this vicious microbe will be forever blessed. His name will be borne to our posterity in monumental memory.

Medical Men and Marred Minds.—The Nineteenth Annual Session of the Association of Medical Officers of American Institutions for Idiotic and Feeble-Minded Persons, was held at the New Haven House, New Haven, Connecticut, May 28th, 29th, and 30th, 1895.

The following interesting program entertained the members: "Annual Address of the President," A. W. Wilmarth, M. D., Norristown, Pa.; "Moral Paranoia," Martin W. Barr, M. D., Elwyn, Pa.; "Abnormal Psychology," A. M. Miller, M. D., Lincoln, Ill.; "Provision for the Feeble-Minded Class in England, with Notes on the Special Classes for Abnormal Children in Connection with the London Board Schools," G. E. Shuttleworth, B. A., M. D., London Hill, Surrey, England; "Results of One Year's Work in Practical Woodwork and Carving," Margaret Bancroft and Jean Weir Cox, Haddonfield, N. J.; "Physical Training for the Feeble-Minded," S. J. Fort, M. D., Ellicott City, Md.; "Sporadic Cretinism," Geo. Moyridge, M. D., Glenwood, Ia.; "What Next?" Isabel Barrows, Boston, Mass.; "The Future of Our Association," W. B. Fish, M. D., Wheaton, Ill.; "Suggestions for the Improvement of our Methods of Collecting Aetiological Data," W. H. C. Smith, M. D., Lincoln, Ill.; "Defects and Diseases of School Children," Fletcher Beach, M. B., F. R. C. P., London, England; "A Pathological Study," Delia E. Howe, M. D., Ft. Wayne,

Ind.; "Types of Idiocy and Imbecility," Fletcher Beach, M. B., F. R. C. P., London, England.

At 10 A. M., Tuesday, May 28th, the cause of the Feeble-Minded was presented before the National Conference of Charities and Correction at the Yale Theological Seminary.

Officers for 1895-6: President, Dr. S. J. Fort, Ellicott, City, Md.; Vice-President, Dr. M. W. Barr, Elwyn, Pa.; Secretary and Treasurer, Dr. A. C. Rogers, Fairbault, Minn.; Reporter and Editor, Mrs. Isabel Barrows, Boston, Mass.

The session was of unusual profit and interest to the members.

Medico-Legal Congress—Preliminary Announcement.—The Medico-Legal Society announces a Medical Congress at or near the City of New York on the 4th, 5th, and 6th of September, 1895, (place to be hereafter announced), open to all students of Medical Jurisprudence, under the charge of a committee of arrangements, composed as follows:

Ex-Surrogate Rastus S. Ransom, Chairman; Clark Bell, Esq., Sec'y, 57 Broadway, N. Y.; George Chaffee, M. D., Treas., 224 47th St., Brooklyn, N. Y.; Moritz Ellinger, Esq., H. W. Mitchell, M. D., Constantine J. MacGuire, M. D., Prof. A. M. Phelps, M. D.

A general invitation to all persons interested in the Science of Medical Jurisprudence is extended, and members of the Society, active, corresponding or honorary, who wish to enroll will forward their names and the enrolling fee to the Secretary or Treasurer. A considerable number of papers have already been secured, and the interest taken in the movement warrants the expectation of a large and influential meeting of the friends and students of Forensic Medicine on the occasion.

An official circular will be issued later, and all persons contributing papers will please forward their titles to the Secretary, to enable proper classification to be made for the formal announcement.

CLARK BELL,
Secretary.

RASTUS S. RANSOM,
Chairman Committee
of Arrangements.

IN MEMORIAM.

BY the death of Huxley, England loses one of its greatest intellectual lights and science one of its most scholarly, laborious and exact investigators. This son of a plain schoolmaster has left an indelible impression upon science and now ranks as one of the intellectual giants of this century. For extent of knowledge and depth of culture, not only in biological science, but in allied subjects and more especially in philosophy; we believe that Professor Huxley has never been surpassed.

The mental traits which distinguished him principally were: philosophic culture, great powers of generalization, which made him quick to perceive the fundamental laws underlying organic nature, along with broad scholarship and a faculty of exact observation.

All these have made him one of the foremost scientific figures of our century. We do not propose to give his biography here, but only wish to point out and emphasize a few of his many contributions to science.

His "Memoir on the Anatomy and Affinities of the Medusæ", read before the Royal Society in 1849, was his first important contribution to biological science.

In this memoir, besides describing many new species, he made a very important generalization, in showing that the external and internal limiting membranes of the medusæ were indential or homologous with those of the rest of the animal kingdom.

In his "Oceanic Hydrozoa," 1856, he made many more important contributions to our knowledge of these zoophytes. Prior to Huxley's time, Goethe, Oken, Owen and others held to the doctrine that the skull is a modified vertebral column and that it was composed of three or more vertebrae. In 1858 in his Croomian Lecture on the "Theory of the

Vertebrate Skull," Huxley gave the death blow to this doctrine, by showing that in the embryo no proto or primitive vertebrae were laid down in the floor of the skull. He thus laid the foundation of the new theory of the vertebrate skull, which the remarkable researches of Gegenbaur have substantiated.

Later it remained for him to give another proof of his boldness in generalization and far seeing sagacity. When in 1859 Darwin published his *Origin of the Species* announcing his inductive law that species were derived one from another, he refrained from extending this generalization to man.

Huxley showed in 1863 in his "Evidence of Man's Place in Nature" that the descent of man from the lower animals was a necessary corollary of the doctrine.

In this work he gives a masterly resumé of the chief anatomical affinities of man and the apes, revives the Linnean term of *Primates* for man and apes and after showing that there is a greater difference between the lower and higher apes than between the lowest man and the highest ape; he comes to the conclusion that the descent of man from the lower animals is a necessary deduction of the law of evolution.

When published, his book was considered audacious, nay, ridiculous, and he had to endure much abuse from all quarters. It is, however, gratifying to think that he lived to see the change of opinion which has taken place in regard to the doctrine of evolution.

About this time he became involved in one of the most memorable controversies in the history of modern science.

That great comparative anatomist, Richard Owen, animated by his zeal for the Mosaic Cosmogony and eager to show an impassible gulf between man and the lower animals, asserted that the brain of man alone had an occipital lobe, an hippocampus minor and a posterior cornua.

Huxley, in reply, stated that the occipital lobe was not peculiar to man alone, as it existed in the brain of higher apes and asserted that the same was true of the existence of an hippocampus minor and posterior cornua. Marshall

and Rolliston's dissections of a chimpanzee and orang demonstrated the truth of Huxley's propositions. In reply Owen referred to figures of dissections made by Tiedemann, Schroeder van der Kolk and Vrolik, in support of his assertions, but these anatomists affirmed that their figures showed precisely the contrary and confirmed the views of Huxley. That great German anatomist, Rudolf Wagner, conservative as he was, supported Huxley in this controversy, which resulted in his complete justification before the scientific world. Richard Owen was one of the greatest anatomists who ever lived, yet he made a great mistake when he tried to harmonize facts with preconceived views.

Whatever subject Professor Huxley touched upon he showed his mastery of it. In his "Lay Sermons", 1870, he treats with equal facility upon biology, paleontology, social and educational topics.

In his classification of animals he was the first to remove the Echinodermata from Cuvier's old order of Radiata, and showed their affinity to worms. In 1871 his "Anatomy of Vertebrated Animals" appeared and this was followed in 1877 by his "Anatomy of Invertebrated Animals." These two works for comprehension, conciseness and scientific exactitude have never been surpassed. In our opinion they are only equalled by the works of Gegenbaur. They have been and will continue to be classics in science. At a meeting of the British Association at Belfast, in 1874, he revived and defended with great ability the old idea of Descartes, that animals were automata. Based upon certain cases of brain injury, he supported the doctrine, that the apparently voluntary movements of animals and even those of man were automatic, independent of the will and to a certain extent of consciousness. He held that animals are complex mechanisms wound up to run for a certain time, that consciousness is a concomitant of, but has no controlling influence, over these activities.

In dealing with affinities of vertebrates, Professor Huxley was an innovator. He classed the fishes and amphibians together as Ichthyopsida, pointed out the affinities of birds and reptiles and put them together under the class Saurop-

sida. He sketched the progenitors of birds and also of the horse. The discovery of toothed birds and of the tertiary ancestors of the horse by Professor Marsh have verified his conceptions in a remarkable manner.

In 1879, his biography of Hume appeared, whose views he shared upon the impossibility of metaphysics. He treats of his subjects in a happy manner, showing great philosophical insight.

In his work on the "Crayfish", 1879, he has shown how by dealing with single animal types, morphological and physiological problems can be elucidated.

Whether in biology, philosophy, psychology or in ethical and social questions, Professor Huxley was equally at home. His controversies with Mr. Gladstone and with Dr. Wace and the Bishop of Peterboro, showed unusual and surprising power as a theological critic. Numerous valuable papers of Prof. Huxley are scattered through the Transactions and Journal of the Royal, Linnaean, Geographical and Zoological Societies and various periodicals. His articles on "Amphibia," "Biology," "Evolution" and "Animal Kingdom" in the Encyclopedia Britannica are models of their kind. Professor Huxley's style was peculiarly appropriate to the man of science, concise, dignified and scholarly. His life was a noble and useful one, consecrated to the advancement of knowledge. He constitutes one of the greatest glories of the British nation and his name has become imperishable in the annals of science.

ARTHUR E. MINK, M. D.

REVIEW, BOOK NOTICES, ETC.

DISEASES OF INEBRIETY FROM ALCOHOL, OPIUM, AND OTHER NARCOTIC DRUGS: ITS ETIOLOGY, PATHOLOGY, TREATMENT AND MEDICO-LEGAL RELATIONS. By the American Association for the Study and Cure of Inebriety. 8vo, pp. 400. Price, \$2.75. E. B. Treat, 5 Cooper Union, New York.

The book is partly a compendium of some of the more important investigations of the American Association for the Study of Inebriety—extending over a period of more than twenty years. The arrangement of the material, which has become voluminous, is the work of Dr. Crothers himself. As Dr. C. has been the secretary of the Society ever since its foundation, he is peculiarly fitted for the task of shifting, arranging, and collating the facts and principles involved in the undertaking. The original investigations of the author and compiler of the work are very considerable, and they materially enhance its value.

The volume contains some accounts of the inquiries of "Mason, Day, Crothers, Mattison, Mann, Hughes, Searcey, Wright, Davis, Sheppard, Morris and many others in this country—as well as of Peddie, Kerr, Clouston, Carpenter, Ridge, Richardson and others abroad."

The book is filled with an almost innumerable array of facts and deductions of the highest order of interest and importance. The work is concerned, not so much with the open exhibitions of inebriety, as it is with the principals of science and biology which make inebriety possible—which in fact make it common and intractable. It also points out, either directly or by implication, the applications of these scientific principles to the facts of inebriety—to their prevention as well as their removal.

Thus the work insensibly leads the mind of the reader to first principles—to causes rather than phenomena; and it irresistibly impresses upon it the great truth that inebriety is not alone the work of individuals immediately implicated, but that it is strictly a disease—diverse in its origin, and boundless in its tendencies. In short the lesson is inculcated that inebriety has claims upon the attention and labor of good citizenship everywhere. A definite analysis of the work in a brief notice is manifestly impracticable. It will no doubt be extensively read.

T. L. W.

INSANITY AND ALLIED NEUROSES; PRACTICAL AND CLINICAL. By George H. Savage, M. D., M. R. C. P., Physician and Superintendent of Bethlem Royal Hospital; Lecturer on Mental Diseases at Guy's Hospital; Joint Editor of *The Journal of Mental Science*, with illustrations. New and enlarged edition.

This is one of Lea Brothers & Co.'s practical clinical manuals for practitioners and students of medicine.

The name of the distinguished author is a guarantee of a highly scientific tone and a thoroughly literary quality of the book. A cursory examination and an examination of its contents sustains the tacit guarantee of its author's well-known fame in clinical psychiatry. It has numerous illustrations, and is sufficiently compact and small in bulk to be carried by the student. Hair-breadth and tedious differentiation of forms of Insanity are in this book judiciously omitted, as they should be for general practitioners and students. The descriptions are plain and thoroughly clinical.

HYDRIODIC ACID AND CHEMICALLY PURE HYPOPHOSPHITES, by R. W. Gardner. Twelfth Edition, New York, 1895.

Much time and study have been expended on this work, though it treats of the therapeutics of these remedies almost entirely. The author has made a special and profitable study of the hypophosphites, and has attained to the celebrity of an expert on this subject, so that Gardner's hypophosphites have become familiar to the profession, and noted for their purity and efficiency. Gardner's hydriodic acid is equally meritorious with his hypophosphites. This valuable brochure will be sent only to physicians, on request and receipt of their professional cards.

TRAITE CLINIQUE ET THERAPEUTIQUE DE L'HYSTERIE. Par le Dr Gilles de la Tourette. 2^e Partie. Deux volumes in-8^o avec 63 figures et un portrait a l'eau-forte du professeur Charcot. Prix : 15 fr. E. Plon, Nourrit et Cie, editeurs. 10, rue Garanciere, Paris.

The name of the author is all the commendation necessary. To many of our readers *la langue Francais* is as familiar as the English language is to the many to whom it is their mother tongue. We cordially commend these valuable volumes.

TEXT-BOOK OF NERVOUS DISEASES; For the Use of Students and Practitioners of Medicine. By Charles L. Dana, A. M., M. D., Professor of Nervous and Mental Diseases in the New York Post-Graduate Medical School and in Dartmouth Medical College, Visiting Physician to Bellevue Hospital, Neurologist to the Montefiore Home; ex-President of the American Neurological Association, etc. Third Edition, with 210 illustrations. In red cloth, fine paper, 550 pages. New York: William Wood & Co. 1894.

The second edition of this work appeared in 1893, now we have the third, thus proving its popularity. In this book as pointed out in the preface to this edition, the student can master the essentials of neurology without encountering any arid waste of words, and the practitioner who wishes to study special subjects can find them presented concisely and with a degree of completeness in this work. Dana's Text-Book has become a standard with students.

MYXOEDEMA AND THE THYROID GLAND is a well written, instructive and enjoyable little book, which will not take too much of the practitioner's time and yet will give him all the information attainable on this interesting subject. The book has been enlarged by the author and translated into English from an inaugural thesis in Portuguese.

The immense advance in knowledge of this subject of late justifies the book at this time, and it is also as the author has intended, a just compliment to the work of the Portuguese surgeons in the study of this disease.

The author's name is John D. Gimlette, and the reader will not have proceeded far in the perusal of the author before he shall have discovered that the author has bored deeply into this subject. J. & A. Churchill, 11 New Burlington Street, London, are the well-known publishers.

REMOTE CONSEQUENCES OF INJURIES OF THE NERVES AND THEIR TREATMENT.—An examination of the present condition of wounds received in 1863-5, with additional illustrative cases. By John K. Mitchell, M. D., Assistant Physician to the Orthopaedic Hospital and Infirmary for Nervous Diseases, Philadelphia; Lecturer on Physical Diagnosis in the University of Pennsylvania. In one handsome 12mo. volume of 233 pages, with 12 illustrations. Cloth, \$1.75. Philadelphia: Lea Brothers & Co.

This is a valuable, practical brochure from a reliable source of clinical observation.

THE NAMING CENTRE, by Charles K. Mills, M. D., Professor of Mental Diseases and of Medical Jurisprudence in the University of Pennsylvania.

etc., and J. W. McConnell, M. D., Instructor in Nervous Diseases and Electrotherapeutics, and Chief of the Nervous Clinic in the Philadelphia Polyclinic, etc., is a plausible attempt, sustained by an interesting autopsy, to confirm the views of Broadbent, Kussmaul and Charcot as to the existence of such a center in the temporal lobe.

Traumatic Cyst of the Brain from an Injury received Twenty-five Years Before.—Epilepsy; Operation; Recovery. By J. T. Eskridge, M. D., Professor of Nervous and Mental Diseases in the Medical Department of the University of Colorado, etc., Denver, Col.; and F. F. McNaught, M. D., Surgeon to the Union Pacific and Denver and Gulf Railroad Company, Denver, Col.

THE BULLETIN OF THE AMERICAN ACADEMY OF MEDICINE for June, 1895, presents an interesting table of contents, and includes the entire transactions of the last meeting. It is published bi-monthly for the Academy by its secretary at Lafayette College, Easton, Pennsylvania. Annual subscription price, \$3.00.

THE COLORADO CLIMATOLOGIST, Vol. 1, No. 9. Edited by Charles Manly, A. M. M. D., and Josiah N. Hall, M. D., Associate Editor. South Denver, Colorado. July, 1895, is on our table presenting a neat appearance, and an entertaining table of contents for the doctor who has to advise the health-seeking tourist.

Trephining the Skull in a Case of Idiocy, with Remarks. By William Fuller, M. D., Prof. of Anatomy, Medical Faculty, University of Bishop's College, Montreal, Can. (Read before the Medico-Chirurgical Society of Montreal, 1878.

[This is evidently the pioneer operation of this kind on this continent.]

Report of One Hundred and Forty-five Operations done for the Removal of Ovarian Tumors and Pathological Conditions Associated with the Ovaries and Uterine Appendages Only. By A. Vander Veer, M. D., Professor of Didactic, Abdominal and Clinical Surgery, Albany Medical College, Albany, New York.

The Physical Signs of Septic Cellular Oedema of the Lung Considered in their Relation to the Pathological Changes. By William C. Glasgow, M. D., Professor of Practice of Medicine, Diseases of the Chest, and Laryngology, Missouri Medical College, St. Louis, Mo.

The Results of Double Castration in Hypertrophy of the Prostate: With a Consideration of Allied Methods and a Table of Cases. By J. William White, M. D., Professor of Clinical Surgery in the University of Pennsylvania, etc., Philadelphia.

Civil Service Reform in State Institutions—Reorganization of the Medical Staff. By Boerne Bettman, M. D., Professor of Ophthalmology and Clinical Otolaryngology in the College of Physicians and Surgeons, etc., Chicago.

Opinions of the Press on a Bill to Establish a Bureau of Public Health within the Department of the Interior of the United States. Prepared by the National Quarantine Committee of the New York Academy of Medicine.

A Case of Acute Delirium: With some Considerations on its Pathologic Aspect. By Thomas P. Prout, M. D., Pathologist and Second Assistant Physician to the New Jersey State Hospital at Morris Plains.

Two Cases of Pseudo-Hypertrophic Paralysis in Brothers: Clinical

Lecture Delivered at the Chicago Policlinic. By Archibald Church, M. D., Professor of Neurology, Chicago Policlinic, etc.

Rudolf Virchow. An Address delivered before the Medico Chirurgical Society of San Francisco. By Levi C. Lane, A. M., M. D., (Berol.,) M. R. C. S. Eng., San Francisco, Cal.

Report to the Members and Friends of the Syrian Society, at the First Anniversary held in the First Presbyterian Church, New York, May 4, 1893. By W. M. McLaury, President.

Some Minor Studies in Nerve Cell Degeneration as Presented by a Case of Localized Cerebral Atrophy. By Thomas P. Prout, M. D., State Hospital, Morris Plains, N. J.

Report of Cases of Brain Lesions—Abscesses, Meningitis, and Sinus Thrombosis—Resulting from Disease of the Middle Ear. By J. T. Eskridge, M. D., Denver, Col.

Report of Two Interesting Cases: Word-Blindness; Localized Muscular Spasms Illustrating Cerebral Localization. By J. M. Keniston, M. D., Middletown, Conn.

Idiosyncrasy and Drugs. By G. Walter Barr, M.D., Professor of Materia Medica, Therapeutics, etc., in the College of Physicians and Surgeons. Keokuk, Iowa.

Supra-Pubic Cystotomy for Calculus of the Bladder. By A. H. Meisenbach, M. D., Professor of Surgery in the Marion-Sims College of Medicine, St. Louis, Mo.

Squint—With Special Reference to Its Surgery. By Charles H. Beard, M. D., Chicago.

Chronic Tuberculosis.—A Study of Four Cases. By E. R. Axtell, M. D., Professor of Diseases of Children and Clinical Lecturer in the University of Denver, etc.

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THE
ALIENIST AND NEUROLOGIST.

VOL. XVI.

ST. LOUIS, OCTOBER, 1895.

No. 4.

ORIGINAL CONTRIBUTIONS.

"THE PROGRESS OF LUNACY."*

By L. FORBES WINSLOW, M. D., London.

Vice-President of the Medico-Legal Congress; Chairman Department of Insanity
and Mental Medicine.

IT has given me the greatest pleasure to accede to the request of your worthy President, Clark Bell, Esq., to preside over the psychological branch of your congress. The distinction conferred upon me is one not lightly to be esteemed. To be chosen from a body of distinguished physicians, whose admitted eminence and profound learning, whose scientific attainments and undoubted eloquence place them in the foremost ranks of their profession, is an event which I shall for long cherish as a compliment of the highest description, and will prove to me one of the most agreeable and gratifying occurrences of my checkered career.

The subject chosen is an immense one, and it is impossible to condense such a vast question into the time at my disposal. I will trace the gradual progress of lunacy from the earliest periods up to the present time, briefly referring to its condition in various countries.

I trust the society will pardon me on this occasion, my first visit to the United States, for alluding to the memory

* An Address delivered at the opening of the Department of Insanity and Mental Medicine, of the Medico-Legal Congress, Sept. 4th, 1895.

of my revered father as no account of the history of insanity, in my opinion, would be complete without doing so.

Following in the steps of Pinal, Jukes of York, and the late Dr. Connolly, he was one of the first to systematize a gentle, persuasive, and loving treatment of the insane, who had hitherto been regarded in the light of wild beasts to be curbed and restrained by bolts, bars, and keepers' whips, rather than as human beings, fallen, indeed, from their high estate, but amenable to tenderness and judicious kindness. He it was who created the science of psychology and gave it a local habitation and a name, at least so far as Great Britain is concerned. He was the first physician who urged the plea of insanity in criminal cases, a plea which has outlived the assaults of popular clamor and ignorance, and is now accepted as valid in the courts of law.

PAYS TRIBUTE TO HIS FATHER.

He largely contributed to the literature of the country. His "*Onus Magnum*," entitled "The Obscure Diseases of the Brain" is one of the scientific classics of the English language. These achievements, combined with his successful ministry to mind disease and his unvarying kindness, generosity, and deep religious feeling, have earned for him a world-wide reputation, a reputation which will shine with purer and clearer lustre as time allows of full justice being done to the great work he has accomplished.

He is now happily beyond the reach of all human criticism; the work of his anxious life consummated, he sleeps well. He was the ninth son of Capt. Thomas Winslow of her Majesty's Forty-seventh Regiment, and of Mrs. Mary Winslow, whose memoirs, under the title of "Life in Jesus," have obtained for her considerable celebrity in the religious world, not only of my country, but more especially of yours.

My father was a lineal descendant of the famous Edward Winslow, first Governor of New Plymouth, one of the leaders of the Pilgrim Fathers who left England in the Mayflower in 1620. During the war of Independence the Winslows were ardent royalists, and at the termination of the war all the extensive family estates at Boston were

confiscated and the remnant of the family came to England. He was educated in Scotland and commenced his professional education in New York, completing it in England. At the commencement of his career, owing to the straitened family circumstances, previously alluded to, my father was met by obstacles on all sides. He arrived at London with half a dollar in his pocket, and now commenced the struggle. He got an immediate appointment in *The Times* office, and his duty was to report the Parliamentary speeches, which appeared *in extenso* the following morning, after which he would go to the dissecting room, and, with the aid of a candle, work into the early hours. With this and the proceeds he obtained for some books bearing on medicine, before he was qualified, he paid all his own fees due for his curriculum, without any assistance. He qualified in 1835, and gradually worked his way up a self-made man to the highest position in the branch of the profession which he had chosen his own.

Besides being one of the greatest contributors to the literature of psychology, he was engaged in the chief medico-legal cases during a long period of his career, the first being the case of MacNaughten, well-known to all students of mental jurisprudence, when he was, though not engaged in the case, publicly called by the Judge, who knew he was in court, though only as a spectator at the time. So much for his professional and public life. Of his generosity and kindness to needy members of the profession, and to those around him, of his geniality and brightness, and the deep religious principles which enabled him to minister to the souls as well as to the bodies of his patients, it is not my desire to speak; these are written, I trust, in the records of another book. He died in March, 1874, having earned for himself an imperishable memorial in the love and gratitude of his countrymen.

He always entertained from his earliest recollections the most sincere affection for all American citizens, in whose country he had lived in his early days, and always expressed the utmost desire to revisit your shores. This, however, he was unable to do, but this pleasure has been

left to one who is only a poor representative of that illustrious man to whom I have briefly alluded.

LUNACY IN OLDEN TIMES.

I propose very briefly to trace the condition of lunacy in various parts of the universe. The recognition of insanity by the ancients is clearly established. Our classical writers, who lived many years before Christ, frequently alluded to it. The Bible contains repeated reference to persons mentally afflicted.

The madness of Saul may be mentioned as one of the first instances we possess, while David was supposed to have been subdued by music during his attack of maniacal fury. David feigned madness, and in the First Book of Samuel, Chapter xxi, we read: "Then said Achish unto his servants, Lo, ye see the man is mad: wherefore, then, have ye brought him to me? Have I need of mad men, that ye have brought this fellow to play the mad man in my presence? Shall the fellow come into thy house?"

The first institute was established at Jerusalem in 491. In the twelfth century we read of one at Bagdad, called Del Almerapthan, or House of Grace, in which building all persons of unsound mind were received in Summer and kept confined in chains until they recovered.

About fifty years ago there was at Fez, the Holy City of Morocco, an asylum, in which poor patients were chained until they recovered.

The oldest hospital for insane in Europe is Bethlehem Hospital. Henry VIII., in 1547, seized upon the institution, which up to that time had been used for a monastery, and presented it with all its revenues to the City of London as a residence for lunatics. This was absolutely the first establishment for the insane founded in England. In 1660, when experiments for the transfusion of blood were being made in Paris before the Academy of Sciences, on a youth and a lamb, so much satisfaction was expressed at the result that the Royal Society of London became anxious to perform the same in England, but were at a loss for a subject. Sir George Ent suggested that it would be advisable to perform the operation on an inmate of Bethlehem.

INSANE PEOPLE BADLY TREATED.

This proposal having met with the approval of the Royal Society, Dr. Allen, the Medical Superintendent of Bethlehem Hospital, was called upon to produce a lunatic for the experiment. He, however, positively refused to grant this request. After this, in Paris, the experiment was again attempted upon a lunatic, who died in the arms of M. Delus, who was the operator. I allude to this incident to show with what feelings persons of unsound mind were regarded at the epoch of which I speak. Many lunatics were burned for witchcraft, while others were confined in dens fit only for wild beasts.

The first lunacy bill introduced into the English House of Parliament was in 1845 by Lord Ashley, who subsequently became Lord Shaftesbury, a man beloved by all who knew him, and whose life was occupied in trying to benefit mankind, and to whom a grateful country has lately erected a public monument in London. In introducing this bill he said that "the whole history of the world until the era of the Reformation does not afford an instance of a single receptacle assigned to the protection and care of these unhappy sufferers, whose malady was looked upon as hardly within the reach and hope of medical aid. If dangerous, they were incarcerated in the common prison; if of a certain rank in society, they were shut up in their houses under the care of appropriate guardians. Chains, whips, darkness and solitude were the approved and only remedies."

In 1875 the new building of Bethlehem was completed, the design being taken from the Tuileries at Paris, at a cost of £17,000, the accommodation then being for 150 patients. Two additional wings were added in 1734, and in 1751 the Hospital for St. Luke's, situated in the City of London, was erected, while in Manchester, York, and other large cities, hospitals and asylums for the insane were rapidly established. The first legislative enactment for the protection of lunatics was contained in a section of the Vagrant act in 1788, and it is as follows:

Two Justices of the Peace were authorized to issue a warrant for the

arrest of any lunatic, who was to be locked up in a secure place, and if it was found necessary he was to be chained and confined in his own parish; and if in possession of any property, it was to be expended for his maintenance.

Various Parliamentary committees met between this time and the passing of the Lunacy act of 1845, but as it was customary in these assemblies in England, there was more talk than action. Nothing was done until nearly 100 years after the first Parliamentary committee met.

PRESENT LUNACY LAW IN ENGLAND.

The 1845 Lunacy act, with one of the most unimportant amendments, remained in existence until our present law, which came into operation in 1890. In 1877, a Parliamentary committee sat, in consequence of alleged irregularities in the law. It consisted of fifteen members who sat patiently throughout the whole of the Summer. The chief witnesses were lunacy experts, Government officials, discharged lunatics with imaginary grievances, former inmates of asylums, ever eager to make complaint. The result of this was a bulky official blue book as the outcome of what had taken place.

Clouds and mists were dissipated and there remained the fact, as testified to by reliable witnesses, that the law as then administered was sufficiently equitable and humane. The report concluded by stating, notwithstanding all the evidence, "in no single instance had *mala fides* been proved."

Thirteen years after this, without any further Government inquiry, was passed the act of 1890, which I will at once pronounce as inferior to the old act, and in certain ways very complicated. A lengthy consideration does not appear to me to come within this department of congress, and I therefore only very briefly propose to allude to that part of it which directly refers to the admission of patients into asylums in England.

To admit a patient into an asylum, in ordinary cases of lunacy, can be dealt with in one or two ways. First, a petition signed by a relative, accompanied by two medical

certificates, is presented to a Justice of the Peace, Magistrate, or County Judge, who, if he is satisfied, signs the reception "order," and the patient can be admitted forthwith, and those taking part in such removal are protected by the statute. There are certain persons who are prohibited from signing the order or medical certificate, but I will not weary you with a detailed account of the act, with its 342 sections. I only think it desirable to inform you as to the admission of lunatics in England. Then, in an urgency case, a patient can be admitted on one certificate, accompanied by an order of a relative. Upon these documents any one can be received into an asylum. Within a specified time of the reception under these circumstances, two fresh medical certificates have to be obtained, and a petition signed by the relative. These are presented to a Justice of the Peace having authority in the matter, who, if, he is satisfied, signs the reception "order."

INCREASE OF INSANITY IN GREAT BRITAIN.

In Great Britain on the 1st of January, 1895, according to the very latest available statistics, there were 94,081 persons registered as of unsound mind in the various institutions of England and Wales. As compared with the registered lunatics on the 1st of January, 1894, there is an increase of 2,014. These lunatics are distributed in private asylums called licensed houses, in county and borough asylums, registered hospitals, naval and military hospitals, criminal lunatic asylums, workhouses, private single patients, and outdoor paupers.

Of this gross total, 61,908 are detained in county and borough asylums, whereas the private lunatics in licensed houses amount to 4,178, the remaining number being distributed in the other receptacles for lunatics, which I have previously mentioned. Taking the decade from 1859 to 1869 inclusive, the average annual increase was 1,641; in that between 1869 and 1879 it was 1,671; in that between 1879 and 1889 it was 1,445, while in the six years between 1889 and 1894 it was 1,628.

The estimated population of Great Britain at the present day is 14,727,164 males and 15,666,914 females, making a

gross total of 30,394,078 individuals. The ratio per 10,000 of lunatics to the population is 29.06 males and 32.75 females, or a gross total of 30.95. Whereas in 1886, when the total population amounted to 27,581,780, statistics show us that in every 10,000 of the population there was the ratio of 28.12 of lunatics. Thus we see that in ten years there has been an increase of over 1,000 persons of unsound mind in every 10,000 of the gross population in Great Britain.

The increase of pauper lunacy has been very general throughout the country, and in only 8 of the 56 counties in England is there a decrease; the increase being largest in the County of London, viz., 482. Notwithstanding what we have written on the contrary, there has been, as it is proved by statistics, a gradual increase in insanity in Great Britain, though many of the insane when at first stricken can be treated outside an institution. There is no provision for such treatment beyond the hospital founded for lunacy in America.

AID FOR INSANE IN AMERICA.

It was not until the middle of the eighteenth century that any steps were taken for providing for the care and treatment of the insane in America. Drs. Bond and Franklin, in 1750, inaugurated a movement for this purpose in the city of Philadelphia, Penn.; a memorial was presented the following January to the Provincial Assembly for a charter for an insane asylum and asking for pecuniary assistance.

A bill in accordance with this wish was passed in February, 1751. Two thousand pounds were voted as a preliminary, and Thomas Bond and Franklin were nominated two of its managers. Steps were immediately taken to provide for the care of the insane, and a private asylum was rented for a time, pending the construction of a proper establishment. This private house was open in February, 1752, and on the 11th day of that month the first patients ever placed in such an institution in the United States were admitted for treatment, and I understand that ever since that time one wing of the Pennsylvania Hospital has been devoted to the care of the insane.

On May 23, 1755, patients were received in the new building. The first State Institution for lunatics was opened in 1773, at Williamsburg, Va., also one in New York in July, 1797. This was the germ of what is now known as the Bloomingdale Asylum. The Maryland Hospital, in Baltimore, made provision for lunatics the same year, and this accommodation was increased in 1807. From that date up to the present there has been a steady increasing interest taken in the management and welfare of the insane in the United States, and I am looking forward with much pleasure to visiting these institutions and adding my poor testimony to what I have already heard of the general excellency of your system.

AMERICA VIEWED FORTY YEARS AGO.

In an article which appeared in my father's *Journal of Psychological Medicine*, so far back as 1851, by Dr. Ball, entitled "A Recent Visit to Some of the American Asylums," he writes:

"The physical aspect of a country has, we believe, an influence upon the character of its inhabitants, and the grandeur of American scenery, its exhaustive forests, its vast lakes and mountains, magnificent rivers and waterfalls, are morally suggestive of great undertakings. Hence the social institutions of America are for the most part conceived upon a large and extensive scale. Their public buildings, their street architecture, the style of their principal cities prove a noble character breathing rather an air of ostentation than of simple republicanism.

"The progress of American science and literature has been signal, and in that department of the profession to which this journal is dedicated they have shown an energy worthy of a free and enlightened people. At this moment there are philosophical works publishing in America that would do honor to Great Britain. And to what is this to be attributed but to that subject spirit of liberty which emancipates their philosophy from scholastic chains, while in Europe, universities too often restrict the independence of the inquiring mind. Liberty and philosophy must ever go hand in hand; without intellectual liberty there can be no progression of thought, no positive advancement of knowledge.

The liberal scale upon which all the great institutions of America are founded seems to outstrip European competition. Their hospitals for the sick are admirably designed and organized. Nay, we believe that in many respects they are even better managed than many in this country. Their architectural designs are vast and comprehensive—their wards, day rooms, sleeping rooms, baths, kitchens, etc., are lofty and spacious, and well arranged, and so likewise we gather from the various reports which we have from time to time analyzed that their lunatic asylums are admirably constructed, and managed upon the best and most enlightened principles.”

There are about 90,679 persons of unsound mind in France out of a population of 37,988,905, and the average admission per year is rather over 10,000. These are distributed as follows: 35,973 in asylums, 54,707 are taken care of at their own homes, there being one insane person in every 747 of the population. The chief causes for lunacy in France are epilepsy, convulsions, intemperance, destitution and misery, disappointed hopes, and hereditary predisposition. All departments in France must contain public institutions for the reception of lunatics, who are under the direct inspection of the Prefect of the department and other officials. In addition to this, there are several private asylums in the vicinity of Paris, besides in other parts of France.

Much has been done of late years to raise the institutions, and for this the late distinguished Frenchman Charcot worked hard and well, and Dr. Luys is following in his footsteps.

LESS LUNACY IN THIS COUNTRY.

According to figures which I have collected, I have discovered that there is less lunacy in America, as compared with some other countries. In Great Britain the proportion of lunatics is 1 in every 400 of the population. In Scotland, 1 in 430; in Ireland, 1 in every 303; in France, 1 in every 747, and in America, 1 in every 623, one of the smallest ratios, being 1.60 in every 1,000 of the population. In Austria many of the present asylums were originally used

as prisons. The chief official here is called a Master in Lunacy, whose duty it is to exercise his surveillance over all persons *non compos mentis*. He is the guardian and trustee for the time being of the lunatic.

In New South Wales there is one lunatic in every 361 of the population. The number of the general paralytics are considerably less than in England, being one-third of that existing in that country.

In Scotland and Ireland the management and treatment of the insane has much improved during the last few years. The law in each of these countries differs from each other, and also from that in vogue in Great Britain. The first Scotch act was passed in 1857, and the present one in 1866. In the whole of Scotland there are between 10,000 and 11,000 persons of unsound mind. The first effectual act dealing with the lunatics passed in Ireland was in 1821, and the first public asylum opened in that country was that of St. Patrick's Hospital, in Dublin, in 1745, by Dean Swift, who, as he himself has stated:

‘Gave the little wealth he had
To show by one satiric touch
No Nation needed it so much.’

Dean Swift left nearly all his property for the purchase of the land to erect this hospital. As long ago as 1810 a committee appointed by the English Government sat to consider the condition of the insane in Ireland. Several minor acts were passed, but nothing satisfactory until the one previously mentioned in 1891. There are between 8,000 and 9,000 persons of unsound mind in Ireland, and the ratio is, as mentioned previously, one in every 303 of the general population.

Medical Lore in the Older English Dramatists and Poets (Exclusive of Shakespeare).^{*}

By ROBERT FLETCHER, M. D.[†]

IN 1629 there was published in London a curious volume entitled: "Micro-cosmographie, or a piece of the world discovered in essays and characters." It was an anonymous production, but the author was Dr. John Earle, afterward Bishop of Salisbury. Among his "characters" he has a physician and surgeon, and it must be admitted that they are not models of ethical conduct. Of the physician he says:

"His practice is some businesse at bed-sides, and his speculation an Urinall. Hee is distinguisht from an Empericke by a round velvet cap, and Doctors gowne, yet no man takes degrees more superfluously, for he is Doctor howsoever. He is sworne to *Galen* and *Hypocrates*, as University men to their statutes, though they never saw them, and his discourse is all Aphorisms, his reading be onely *Alexis* of Piemont, or the Regiment of Health. The best cure he ha's done is upon his own purse, which from a leane sickliness he hath made lusty, and in flesh. His learning consists much in reckoning up the hard names of diseases, and the superscriptions of Gallypots in his Apothecaries Shoppe, which are rank't in his shelves and the Doctors memory. He is indeed only languag'd in diseases, and speakes Greeke many times when he knows not. If he have beene but a by-stander at some desperate recovery,

^{*}The author having excluded Shakespeare from his list, gives the following explanation therefor, which the reader will doubtless deem satisfactory: Everything relating to the special lines of knowledge of that unequalled writer has been so thoroughly investigated, every allusion to medicine, law, religion, folk-lore, flowers, birds or animals, has been so worked into essay or book, that there is nothing which could now be said that would not seem trite or stale.

[†] Read before the Historical Club of the Johns Hopkins Hospital, May 13, 1895, and abstracted from the Hospital Bulletin.

he is slandered with it, though he be guiltesse; and this breeds his reputation, and that his Practice; for skill is opinion. Of all odors he likes best the smell of Urine, and holds *Vespatians* rule, that no gaine is unsavory. If you send this once to him, you must resolve to be sick howsoever, for he will never leave examining your Water till hee have shakt it into a disease. Then follows a writ to his druggier in a strange tongue, which hee understands though he cannot conster. If he see you himselfe, his presence is the worst visitation; for if he cannot heale your sickness he will be sure to helpe it. He translates his Apothecaries Shop into your Chamber, and the very Windowes and benches must take Phisicke."

As a rule the physician of those times was a more flourishing man than the surgeon. There are proverbial expressions which indicate the general prosperity of the former. In a play by George Chapman, *All Fools*, 1605, III, 1, there is such an instance:

Heaven, heaven, I see these politicians
(Out of blind fortune's hands) are our most fools.
'Tis she that gives the lustre to their wits,
Still plodding at traditional devices;
But take 'em out of them to present actions,
A man may grope and tickle 'em like a trout,
And take 'em from their close dear holes as fat
As a physician.

Of the surgeon he says:

"A Surgeon is one that has some business about his Building or little house of man, whereof Nature is as it were the Tyler, and hee the Plasterer. It is offer out of reparations than an old Parsonage, and then he is set on worke to patch it againe. Hee deales most with broken Commodities, as a broken Head, or a mangled face, and his gaines are very ill got, for he lives by the hurts of the Common-wealth. He differs from a Physitian as a sore do's from a disease, or the sicke from those that are not whole, the one distempers you within, and the other blisters you without. He complains of the decay of Valour in these daies, and sighes for that slashing Age of Sword and Buckler; and thinkes the Law against Duels was made

meerly to wound his Vocation. Hee had beene long since undone, if the charitie of the Stewes had not relieved him, from whom he ha's his Tribute as duely as the Pope, or a wind-fall sometimes from a Taverne, if a quart Pot hit right. The rareness of his custome mak[e]s him pittillesse when it comes; and he holds a Patient longer than our Courts a Cause. Hee tells you what danger you had beene in if he had staide but a minute longer, and though it be but a prickt finger, he makes of it much matter."

Beaumont and Fletcher frequently introduce medical consultations in their plays, and "a physician" or "a surgeon" is nearly always to be found in the persons of the drama. It must be admitted, however, that those great writers had no admiration for medical men of their time. They represent them either as pretenders or pedants, and they are held up to ridicule accordingly. In the play of *Monsieur Thomas*, 1639, II, 1, Francesco is taken with a fainting fit, and is cared for at first by his friends. One of them, Valentine, says:

Come, lead him in; he shall to bed; a vomit,
I'll have a vomit for him.

Alice. A purge first;
And if he breath'd a vain—

Val. No, no, no bleeding;
A clyster will cool all.

In scene 4 the patient is the subject of a consultation:

Enter three physicians with an urinal.

First Phys. A pleurisy I see it.

Sec. Phys. I rather hold it
For *tremor cordis*.

Third Phys. Do you mark the fæces?
'Tis a most pestilent contagious fever;
A surfeit, a plaguy surfeit; he must bleed.

First Phys. By no means.

Third Phys. I say, bleed.

First Phys. I say 'tis dangerous.
The person being spent so much beforehand,
And nature drawn so low; clysters, cool clysters.

Sec. Phys. Now, with your favors, I should think a vomit,
For take away the cause, the effect must follow;
The stomach's foul and furr'd, the pot's unphlegm'd yet.

Third Phys. No, no, we'll rectify that part by mild means;
Nature so sunk must find no violence.

The third doctor, who proposes bleeding, objects to the emetic as a violent remedy. The expression that "the pot's unphlegm'd yet" would appear to mean that no phlegm appearing in the pot, it was to be supposed still in the stomach.

In the next act, Francesco, whose sole complaint is hapless love, is discovered in bed, the three physicians, reinforced by an apothecary, endeavoring to apply their remedies.

First Phys. Clap on the cataplasme.

Francesco. Good gentlemen—

Sec. Phys. And see those broths there

Ready within this hour.—Pray keep your arms in.

The air is raw, and ministers must evil.

Fran. Pray, leave me; I beseech ye, leave me, gentlemen;

I have no other sickness but your presence;

Convey your cataplasms to those that need 'em.

Your vomits, and your clysters.

Third Phys. Pray, be rul'd, Sir.

First Phys. Bring in the lettice-cap.—You must be shav'd, Sir,

And then how suddenly we'll make you sleep.

The commentators have discussed in their ponderous manner the meaning of the "lettice-cap" in the foregoing passage. They suggest a lettice or lattice cap, one of open work, which is absurd; there was a fur, too, called letice, but this would not cool the heated head. There is no doubt that lettuce leaves were applied to the shaven head as an appropriate remedy; the hypnotic effect of the plant was much vaunted in those times. Its use, as well as that of its active principle, lactucarium, has gone by, but in country places in England a like treatment is still employed, and plantain leaves or a cabbage leaf with the morning dew on it is thought to be cooling to the head of a delirious person.

There is a play by Middleton, *A Fair Quarrell*, 1613, IV, 3, in which a surgeon is introduced, whose obstinate pedantry is amusingly contrasted with the impatient anger of the patient's sister. The colonel lies wounded on his bed. His sister begins the interview:

Col.'s Sist. Come hither, honest surgeon, and deal faithfully with a distressed virgin; what hope is there?

Surgeon. Hope? chills was scap'd miraculously. lady

Col.'s Sist. What's that, sir?

Surg. Cava vena; I care but little for his wound i' th' œsophag, not thus much, trust me; but when they come to diaphragma once, the small intestines, or the spinal medul, or i' th' roots of the emunctories of the noble parts, then straight I fear a syncope, the flanks retiring towards the back, the urine bloody, the excrements purulent, and the dolour pricking or pungent.

Col.'s Sist. Alas, I'm ne'er the better for this answer.

Surg. Now I must tell you his principal dolour lies i' th' region of the liver, and there's both inflammation and tumefaction feared: marry, I make him a quadrangular plumption, where I used sanguis draconis, by my faith, with powders incarnate, which I tempered with oil of hypericon, and other liquors mundificative.

Col.'s Sist. Pox a' your mundies frigatives! I would they were all fired!

Surg. But I purpose, lady, to make another experiment at next dressing with a sarcotic medicament made of iris of Florence; thus, mastic, calaphena, opoponax, sarcocolla—

Col.'s Sist. Sarco-halter! what comfort is i' this to a poor gentlewomen? Pray tell me in plain terms what you think of him?

Surg. Marry, in plain terms I do not know what to say to him; the wound, I can assure you, inclines to paralism, and I find his body cacoehymic; being then in fear of fever and inflammation, I nourish him altogether with viands refrigerative, and give for potion the juice of savicola dissolved with water cerefolium; I could do no more, lady, if his best ginglymus were dissevered.—[Exit.]

It seems the wound required to be twice cauterized; the Surgeon says, Act V, 1:

Marry, I must tell you the wound was fain to be twice corroded; 'twas a plain gastrolophe, and a deep one; but I closed the lips on't with bandages and sutures, which is a kind conjunction of the parts separated against the course of nature.

Most of the terms used by this learned Theban are readily understood, but one or two require a passing word. What is meant by "chilis" I cannot tell; the word is probably corrupt. The hypericon is St. John's wort, a vulnerary famous even to this day. I do not know what calaphena is unless it be a misprint for sagapenum. The dressing for the wound was to consist of orris root, gum mastic, calaphena, opoponax and sarcocolla; three highly aromatic gum-resins held together by isinglass as a vehicle; surely this was a good antiseptic application, though somewhat difficult to clean off. What *savicola* is I do not know, but the *cerefolium* is the *chærophyllum* or chervil.

Francis Beaumont, in his elegy on the death of the Countess of Rutland (the daughter of Sir Philip Sydney), indulges in a furious tirade against her physicians; after exclaiming against their venality and ignorance, he gives this explanation of why they failed to save the countess, though they might cure common persons:

And I will show
The hidden reason why you did not know
The way to cure her; you believed her blood
Ran in such courses as you understood
By lectures: you believ'd her arteries
Grew as they do in your anatomies,
Forgetting that the State allows you none
But only whores and thieves to practice on;
And every passage 'bout them I am sure
You understand, and only such can cure:
Which is the cause that both yourselves and wives
Are noted for enjoying so long lives.
But noble blood treads in too strange a path
For your ill-got experience, and hath
Another way of cure. If you had seen
Penelope dissected, or the Queen
Of Sheba, then you might have found a way
To have preserv'd her from that fatal day.
As 'tis, you have but made her sooner blest,
By sending her to Heaven, where let her rest;
I will not hurt the peace which she should have,
By longer looking in the quiet grave.

You will notice the reference to the provision made for dissection, "anatomies," as the poet terms them, by supplying the bodies of those dying in prison.

In the following spirited passage the ingratitude experienced by the Surgeon and the Soldier when the danger is past is well described:

What wise man,
That, with judicious eyes, looks on a soldier,
But must confess that fortune's swing is more
O'er that profession, than all kinds else
Of life pursued by man? They, in a state,
Are but as surgeons to wounded men,
E'en desperate in their hopes. While pain and anguish
Make them blaspheme and call in vain for death,
Their wives and children kiss the surgeon's knees.

Promise him mountains, if his saving hand
 Restore the tortur'd wretch to former strength;
 But when grim death, by Æsculapius' art,
 Is frighted from the house, and health appears
 In sanguine colors on the sick man's face,
 All is forgot; and, asking his reward,
 He's paid with curses, often receives wounds
 From him whose wounds he cured; so soldiers,
 Though of more worth and use, meet the same fate
 As it is too apparent. I have observed
 When horrid Mars, the touch of whose rough hand
 With palsies shakes a kingdom, hath put on
 His dreadful helmet, and with terror fills
 The place where he, like an unwelcome guest,
 Resolves to revel, how the lords of her, like
 The Tradesman, merchant, and litigious pleader,
 And such like scarabs bred in the dung of peace,
 In hope of their protection, humbly offer
 Their daughters to their beds, heirs to their service,
 And wash with tears their sweat, their dust, their scars;
 But when those clouds of war that menaced
 A bloody deluge to the affrighted state,
 Are, by their breath, dispersed, and over-blown.
 And famine, blood, and Bellona's pages,
 Whipt from the quiet continent to Thrace;
 Soldiers, that, like the foolish hedge-sparrow,
 To their own ruin, hatch this cuckoo, peace,
 Are straight though burthensome; since want of means,
 Growing from want of action, breeds contempt;
 And that, the worst of ills, falls to their lot.
 Their service, with the danger, soon forgot.

—Massinger. *The Picture*. 1630, II. 2.

An older writer has tersely described the ingratitude of
 the recovered patient, in an epigram in Timothie Kendall's
Flowers of Epigrams, 1577:

OF PHISITIONS.

Three faces the Phisition hath
 first as an Angell he
 When he is sought: next when he helps
 a God he seems to be.
 And last of all, when he hath made
 the sicke diseased well,
 And asks his guerdon, then he semes
 an ougly Fiend of Hell.

Here is a scene from the play of the famous George
 Chapman. He was dramatist, poet, scholar, and his fine

though rugged translation of Homer holds its own to this day with all other versions. The play is *All Fools*, 1605.

Dariotto has received a slight wound in the head in a chance encounter, when enter Page with Francis Pock, the surgeon; Valerio says:

What thinkest thou of this gentleman's wound, Pock; canst thou cure it, Pock?

Pock. The incision is not deep, nor the orifice exorbitant; the pericranion is not dislocated. I warrant his life for forty crowns, without perishing of any joint.

Dariotto. 'Faith, Pock, 'tis a joint I would be loth to lose for the best joint of mutton in Italy.

(Note. This is a free allusion. A mutton, or laced mutton, was a common term for a *buona roba* or lady of pleasure.)

Rinaldo. Would such a scratch as this hazard a man's head?

Pock. Ay, by'r lady, Sir: I have known some have lost their heads from a less matter, I can tell you; therefore, Sir, you must keep good diet; if you please to come home to my house till you be perfectly cured, I shall have the more care on you.

Valerio. That's your only course to have it well quickly.

Pock. By what time will we have it well, Sir?

Dariotto. A very necessary question; canst thou limit the time?

Pock. Oh, Sir, cures are like causes in law, which may be lengthened or shortened at the direction of lawyer; he can either keep it green with replications or rejoinders, or sometimes skin it fair a th'outside for fashion's sake; but so he may be sure 'twill break out again by a writ of error, and then has he his suit new to begin; but I will covenant with you, that by such a time I'll make your head as sound as a bell; I will bring it to suppuration, after I will make it coagulate and grow to a perfect cicatrice, and all within these ten days, so you keep a good diet.

Dariotto. Well, come, Pock, we'll talk further on't within.

A surgeon of rather more firmness is found in Beaumont and Fletcher's play of *The Chances*, 1621, III, 2. Antonio, who has received several wounds, is a most unruly patient, demanding wine, decrying the food provided for him, and abusing his surgeon, who, he says, has so dressed his wounds that he looks like the figure of the signs of the zodiac in the almanacks; one of his friends remonstrates with him:

Fy, Antonio,

You must be governed.

Antonio. He has given me a damned glyster

Only of sand and snow-water, gentlemen.

Has almost scowred my guts out.

Surgeon. I have given you that, Sir,
Is fittest for your state.

Antonio. And here he feeds me
With rotten ends of rooks, and drowned Chickens,
Stewed pericraniums and pia-maters;
And when I go to bed (by heavens 'tis true, gentlemen),
He rolls me up in lints with labels at 'em,
That I am just the man i' th' almanack,
My head and face is Aries' place.

This ungovernable patient insists on having music and song while he is "opened," as he terms it, that is, has his wounds dressed. He enquires of the surgeon how long he will take to cure him, who replies "forty days;" on which Antonio exclaims:

I have a dog shall lick me whole in twenty,

Good man-mender,

Stop me up with parsley, like stuffed beef,

And let me walk abroad.

Amongst the more or less occult mysteries of medicine the weapon-salve offered a tempting bait to the credulous and a ready profit to the quack doctor who furnished it. Henry Glapthorne, a dramatist almost forgotten, wrote a play in 1635, in which Doctor Artlesse and his man Urinall are important personages. Urinall, who is a ready-witted knave, has met with a young Dutchman named Sconce, who is anxious to figure among the swaggering blades of the town, but being rather lacking in courage, he has purchased a box of the famous salve from the aforesaid Urinall. The scene thus begins:

Sconce. But you are certain *Urinall* this oyntement is Orthodoxall: may I without error in my faith believe this same the weapon salve Authentickall?

Urin. Yes, and infallibly the creame of weapon salves, the simples which doe concurre to th' composition of it, speake it most sublime stuffe; tis the rich Antidote that scorns the steele, and bids the iron be in peace with men, or rust: *Aurelius Bombastus Paracelsus*, was the first inventor of this admirable Unguent.

Sconce. He was my Country-man, and held an Errant Conjuror.

Urin. The Devil he was as soone: an excellent Naturallist, & that was all upon my knowledge, Mr. *Sconce*; and tis thought my master comes very neare him in the secret concerning bodies Physicall, as Herbes, Roots, Plants vegetable and radicall, out of whose quintessence, mixt with some hidden causes, he does extract this famous weapon salve, of which you are now master.

Urinall continues to regale the ears of Master Sconce with wonderful stories of the cures effected by anointing the weapon which had inflicted the wound, and ends with a most convincing incident. A great explosion of gunpowder had taken place on some celebration and threescore persons were blown up, yet, says urinall:

Thirty of their
lives my Master saved.

Sconce Rarer, and rarer yet: But how, good Urinall?

Urinall. He dressed the smoake of the powder as it flew up, Sir, and it healed them perfectly.

Later on Sconce has occasion to use the famous remedy after receiving a slight wound in the arm, and a pleasant discussion takes place in which he and his friend Fortresse, with Doctor Artlesse and a gentleman named Freewit, took part. Freewit begins:

I have seen experience of this weapon salve, and by its
Most mysterious working knowne some men hurt, past the
Helpe of surgery recover'd. * * * Yet I cannot
With my laborious industry invent
A reason why it should doe this, and therefore
Transcending naturall causes, I conclude
The use unlawfull.

* *

Doct. But pray sir, why should it be unlawfull?

Free. Cause Conscience and religion disallow
In the recovery of our impair'd healths,
The assistance of a medicine made by charms
Or subtle spells of witchcraft.

* *

Doct. Conceive you this to be compounded so?

Free. Ile prove it, master Doctor.

* *

Yet to avoide a tedious argument,
Since our contention's only for discourse,
And to instruct my knowledge, pray tell me,
Affirme you not that this same salve will cure
At any distance (as if the person hurt
Should be at Yorke) the weap'ón, dres'd at London,
On which his blood is.

Doct. All this is granted 'twill.

* *

Free. Out of your words, sir, Ile prove it Diabolicall, no cause
Naturall begets the most contemn'd effect,
Without a passage through the meanes; the fire

Cannot produce another fire until
 It be apply'd to subject apt to take
 Its flaming forme, nor can a naturall cause,
 Worke at incompetent space: how then can this
 Neither consign'd to th' matter upon which
 Its operation is to cause effect,
 Nay at so farre a distance, worke so great
 And admirable a cure beyond the reach
 And law of nature; yet by you maintain'd,
 A Naturall lawful agent, what dull sence can credit it?

* *

Doct. Sir, you speake reason, I must confesse, but every cause
 Workes not the same way; we distinguish thus:
 Some by a Physicall and reall touch
 Produce: So Carvers hewing the rough Marble,
 Frame a well polish'd statute: but there is
 A virtuall contact too, which other causes
 Imploy in acting their more rare effects.
 So the bright Sun does in the solid earth,
 By the infusive vertue of his raies,
 Convert the sordid substance of the mould
 To Mines of Mettall, and the piercing ayre
 By cold reflexion so ingenders Ice;
 And yet you cannot say the chilly hand
 Of ayre, or quickning fingers of the Sunne
 Really touch the water or the earth.
 The Load-stone so by operative force,
 Causes the Iron which has felt his touch,
 To attract another Iron; nay, the Needle
 Of the ship guiding compasse, to respect
 The cold Pole Articke; just so the salve workes;
 Certain hidden causes convey its powerfull
 Vertue to the wound from the annoiuted
 Weapon, and reduce it to welcome soundnesse.

Free. This, Mr. Doctor, is
 A weake evasion, and your purities
 Have small affinity;

But that this,

This weapon salve, a compound, should affect
 More than the purest bodies can, by wayes
 More wonderfull than they doe, as apply'd
 Unto a sword a body voyd of life.
 Yet it must give life, or at least preserve it.

Doct. You mistake, it does not,
 Tis the blood sticking to the sword atchieves
 The cure: there is a reall sympathy
 Twixt it, and that which has the juyce of life

Moystens the body wounded.
Free. You may as well
 Report a reall sympathy betweene
 The nimble soule in its swift flight to heaven
 And the cold carkasse it has lately left,
 As a loath'd habitation; blood, when like
 The sap of Trees, which weepes upon the Axe
 Whose cruell edge does from the aged Trunke
 Dissever the green Branches from the Vienes,
 Ravish'd, forgoes his native heate, and has
 No more relation to the rest, than some
 Desertlesse servant, whom the Lord casts off,
 Has to his vertuous fellowes.

Among other somewhat unusual medical treatment, the inspiring courage in a cold-blooded youth by appropriate diet and training is thus told of in *Love's Cure*, III, 2, 1622:

Piorato. Then for ten days did I diet him
 Only with burnt pork, sir, and gammons of bacon;
 A pill of caviary now and then
 Which breeds choler adust, you know—
Bobadillo. 'Tis true.
Piorato. And to purge phlegmatic humours and cold crudities,
 In all that time he drank *aqua-fortis*,
 And nothing else but—
Bobadillo. *Aqua-vitæ*, signior,
 For *aqua-fortis* poisons.
Piorato. *Aqua-fortis*,
 I say again; what's one man's poison, signior,
 Is another's meat or drink.
Bobadillo. Your patience, Sir;
 By your good patience, h'ad a huge cold stomach.
Piorato. I fir'd it, and gave him then three sweats,
 In the Artillery Yard, three drilling days;
 And now he'll shoot a gun, and draw a sword,
 And fight, with any man in Christendom.
Bobadillo. A receipt for a coward! I'll be bold, Sir,
 To write your good prescription.
Piorato. Sir, hereafter
 You shall, and underneath put *probatum*.

In introducing the subject of the venereal disease as next in order for illustration, it is right to say a few words as to the value of such illustrations for critical or historical purposes. It must be born in mind that satirical writers or dramatic poets would be naturally prone to treat the matter from a ludicrous point of view. An element of the comic

seems to be an essential part of familiar descriptions of the consequences of engaging in the wars of Venus, and we should not, therefore, accept without some caution the canons of treatment laid down in the plays. Nevertheless, there are so many allusions to the "word," as it was termed, meaning guaiacum, to the sweating process known as "the tub," to special forms of diet, as well as to manifestations of the ravages of the disease, that altogether it forms a very curious illustration of the popular belief as to the widespread nature of the poison and its appropriate treatment. Hensler, referring to the lack of any description of disease of the genital organs, produced by coitus, in such writers as Horace, Martial, or Juvenal, makes use of the curious argument that in his time neither amorous nor serious poets were accustomed to allude to such an awkward subject, *and yet the disease existed*. Certainly Martial cannot be supposed to have been restrained from saying what he pleased by any motives of delicacy, and considering the minuteness with which he details the physical effect of pederasty, it is a fair argument that had he known of any contagious disease of the genital organs proper, the result of coition, he would have lavished his wit upon so tempting a subject in endless epigrams. But of the existence of a very general knowledge of venereal disease in the sixteenth and seventeenth centuries in England, the following quotations will leave no doubt.

It is not, of course, my intention to enter into the vexed question of the first appearance of syphilis. Whether it can be identified in classic, oriental, or bible writings—whether it originated at the siege of Naples, or was brought from the West Indies by the Spanish discoverers—all of this has been debated vehemently, and it is perhaps a still unsettled question. I must, however, remind you of certain dates. The year 1493, during which the siege of Naples was progressing and Charles VII arrived to take command, has been usually taken to be the year in which the disease became virulent and epidemic. In 1494 it was spoken of as *morbus gallicus*, and as early as 1508 guaiacum was being used as a remedy for it.

The earliest allusion to the scourge which I have met with in general literature is in an old Scottish poem called Rowll's Cursing. It forms part of the Bannatyne MSS. dating from 1492 to 1503, and is published in Sibbald's "Cronicle of Scottish poetry from the thirteenth century to the union of the Crown's," Edinb., 1802, 4 vols. The passage in question is at p. 331 of Vol. I:

Now cursit and wareit be thair werd
Quhyll thay be levand on this erd;
Hunger, sturt, and tribulation,
And never to be without vexation . . .
The paneful gravel and the gutt,
The gulsoch that thay nevir be but,
The stranyolis, and the grit glengor,
The hairschott lippis them before.

In plain English it is as follows:

Now cursed and accursed be their fate,
While they be living on this earth;
Hunger, strife, and tribulation
And never to be without vexation. . . .
The painful gravel and the gout,
The jaundice that they never be without.
The strangury and the *great glengor*.

The *gulsoch* is the jaundice; in Low Dutch it is still *gheelsucht*, or yellow disease. *Stranyolis* is from *strang*, old Scotch for urine which has been retained until it is *strang* or malodorous. The term which concerns us is the *great glengor*. Jamieson in his Scottish Dictionary defines it under various spellings, as *lues venerea*, derives it from old French *gorre*, a sow, and gives the doubtful suggestion that it might have been *glandgore*. How the word sow came to be applied in this connection I cannot explain. You will doubtless remember a similar etymology for the Greek word indicating the especially faulty organ.

In the French and English dictionary of Randle Cotgrave, first published in 1611, is the following definition under *Gorre*, f. a sow (also the French *pockes*, *Norm.*); also bravery, gallantness, gorgeousness, etc. *Femmes á la grande gorre*. Huffing or flaunting wenches; costlie or stately dames.

This is not the only instance of the application of the name of an animal to the venereal disease. I shall shortly have to speak of the "Winchester goose," and in the campaign

of the British army in the Peninsula in the Napoleon wars the name of "the black lion" was given to an extremely destructive form of syphilitic ulceration.

It is not surprising that the vindictive Scotchman should have included the "grand-gorre" among his curses, and the unsavory objurcation, in the shape of "pox take you," or "pox on it," survived to quite recent times. The word did not always mean the venereal disease. Thus Dr. Donne writes to his sister: "At my return from Kent I found Pegge had the poxe; I humbly thank God it hath not disfigured her." The prefix of great, the great-pox, in contradistinction to the small-pox was common enough, and in France *la grande verolle* and *la petite verolle* were in like contrast. You will remember the *mot* of Louis XIV when it was announced in the circle that an actress famous for her amours had just died of the small-pox. "It was very modest of her," said the king.

The nomenclature of the venereal disease is very extensive. I shall only touch upon those names referred to in the poets. In a play by Nash, *Pierce Pennilesse*, 1592, is this passage: "But *cucullus non facit monachum*—'tis not their newe bonnets will keepe them from the old boanache." This most appropriate name is employed also by Shakespeare. Words or allusions indicating its French origin are endless, and its Italian source is not forgotten. Florio in his *Worlde of Wordes*, 1598, has the verb *infranchiosare*, to infect or to be infected with the French poxe; to frenchifie. And on the other hand, the Frenchman Motteux, in his translation of Rabelais, which is a perfect treasury of quaint old English, makes Friar John say: "He looks as if he had been struck over the nose with a Naples cowl-staff." It is amusing to observe how these compliments are reciprocated. In a translation of the *Colloquies* of Erasmus, by Sir Roger L'Estrange, is this passage: "C. Your chin, too, looks as it were stuck with rubies. S. That's a small matter. C. Some blow with a French faggott-stick (as they say). S. Right, it was my third clap, and it had like to have been my last."

There is a name for syphilis of which I have met with

but one instance, namely, *the marbles*. I presume it to have arisen from the chain of enlarged glands in the groin characteristic of the disease. In the Harleian Miscellanies is a play entitled, *A Quip for an Upstart Courtier*, 1592, and in it one says to the doctor: "Neither doe I frequent whorehouses to catch the marbles, and so to prove your patient."

"The scab" was a very common appellation, often used vituperatively, as in some lines of that most charming lyric poet, Robert Herrick. It refers to one of his books and is addressed

TO THE SOWRE READER.

If thou dislik'st the piece thou light'st on first,
Thinke that, of all that I have writ, the worst.
But if thou read'st my booke unto the end,
And still dost this and that verse reprehend,
O perverse man! If all disgustfull be,
The extreme scabbe take thee and thine, for me.

Again in *The Sea Voyage*, by Beaumont and Fletcher:

Is thy skin whole? Art thou not purl'd with scabs?
No ancient monuments of Madam Venus?

And in *The Dutch Courtezan* by Marston:

Is a great lord a foole, you must say he is weake. Is a gallant pocky,
you must say he has the court-skab.

One of the oddest and oldest terms in the copious nomenclature of the venereal disease is the *Winchester goose*. There is no doubt as to its origin. In the early days of London the Bankside was a continuous row of brothels near the river, which were under the jurisdiction of the Bishop of Winchester, and the victim who suffered the usual consequences of a visit to this tainted locality was called a Winchester goose. In course of time the term was applied to the disease itself, and the allusions to it in the old writers are very frequent. John Taylor, the Water Poet, who was intimately acquainted with all river-side customs and phrases, calls it

A groyne bumpe, or a goose from Winchester,

and the Nomenclator, one of the earliest English dictionaries, published in 1585, defines it as "a sore in the grine or yard, which if it come by letcherie, it is called a Winchester

goose, or a botch." In Ben Jonson's *Underwoods* is this passage:

And this a sparkle of that fire let loose
That was rak'd up in the Wincestrian Goose,
Bred on the Bank in times of popery
When Venus there maintain'd the mystery.

Shakespeare has more than one allusion to the goose of Winchester. In an early manuscript entitled "The Pennyless Parliament," preserved in the *Harleian Miscellany*, it is spoken of as the pigeon, and a satirical advice follows for the means of avoiding it: "Those that play fast and loose with woman's apron-strings may chance make a journey for a Winchester pigeon; for prevention thereof, drink every morning a draught of *noli me tangere*, and by that means thou shalt be sure to escape the physician's purgatory." In Webster's play of "Westward hoe!" 1607, Act III, Scene 3, there is an elaborate account of the origin of the term Winchester goose, but it is too lengthy for present quotation.

There are many and even copious allusions in the dramatists and poets to the treatment of syphilis by two methods: the one by sweating in the tub, and the other by guaiacum administered in decoction, the two methods being combined, or the latter following the former.

The earliest representation of the famous tub is, I believe, in the works of Ambrose Pare, page 598 of the edition of 1575. It is rather a cask than a tub. The patient was seated inside on a perforated stool beneath which hot bricks or stones were placed. Through a small trapdoor in the side of the tub a mixture of vinegar and brandy was thrown upon the heated bricks and the steam was confined by a sheet fastened round the patient's neck. In England the common tub used for salting meat, "powdering" it, as the term then was, seems to have been employed. The humorous allusions to this double use are frequent. In *Measure for Measure*, the clown, speaking of Mistress Overdone, the bawd, says: "Troth, Sir, she has eaten up all her beef, and she is herself in the tub." The writer in an article in the January number of *Harper's Magazine*, on Shakesporean phrases in use in the United States, is much

puzzled by this phrase of "in the tub," being evidently unaware of its meaning. He suggests that the expression of "in the soup" has like application. In *Timon of Athens*, IV, 3, is this passage:

bring down rose-cheeked youth
To the tub-fast and the diet.

Sometimes an oven, or a hole in the ground, was used for the sweating, and in every case a strict diet was enforced. Dry food, and above all "burnt" or overdone mutton, cut by choice from the rack or neck, was alone to be had. The quotations will give all this in full. The first is from Beaumont and Fletcher's play of *The Knight of the Burning Pestle*, 1613, III, 5. It is, I think, intended partly as a burlesque on the style of Spenser's *Faerie Queene*. A knight and lady are imprisoned in a cave where they are tortured by a giant. The knight had carried off his "lady dear" from her friends in Turnbull Street, a locality like the Bankside, notorious for houses of prostitution. He begins:

I am an errant-knight that followed arms
With spear and shield; and in my tender years
I stricken was with Cupid's fiery shaft,
And fell in love with this my lady dear,
And stole her from her friends in Turnbull-Street;
And bore her up and down from town to town,
Where we did eat and drink and music hear;
Till at the length at this unhappy town
We did arrive and coming to this cave,
This beast us caught, and put us in a tub
Where we this two months sweat, and should have done
Another month if you had not reliev'd us.

Woman. This bread and water hath our diet been,
Together with a rib cut from a neck
Of burned mutton; hard hath been our fare;
Release us from this ugly giant's snare.
Man. This hath been all the food we have receiv'd;
But only twice a day, for novelty,
He gave a spoonful of this hearty broth
To each of us through this same slender quill.

(*Pulls out a syringe.*)

In the comedy of *Honest Man's Fortune*, by the same authors, 1613, V, 3, there is this reproach to a libertine:

All women that on earth do dwell, thou lovest,
Yet none that understand love thee again,

But those that love the spital. Get thee home,
 Poor painted butterfly! Thy summer's past;
 Go, sweat, and eat dry mutton.

So of a similar gallant in Middleton's Michaelmas Term,
 1607, 1, 1:

He'll be laid shortly;
 Let him gorge venison for a time, our doctors
 Will bring him to dry mutton.

The loss of hair from syphilitic disease did not escape the observation of the satiric poets, and the allusions to French crowns and nightcaps are endless. There is a poem called "A fig for Momus," published in 1595. I have not seen it, but quote from Beloe, who says it is the oldest satire in the language.

Last day I chaunst in crossing of the street,
 With Diffilus the innkeeper to meet.
 He wore a silken nightcap on his head.
 And looked as if he had been lately dead:
 I askt him how he far'd: not well, quoth he.
 An ague this two months hath troubled me.
 I let him passe, and laught to hear his skuce,
 For I knew well he had the pox by Luce.
 And wore his night-cappe ribbin'd at the ears
 Because of late he swet away his heares.

In Your Five Gallants, Middleton, 1608, 1, 1:

"He's in his third sweat by this time, sipping of the doctor's bottle, or picking the ninth part of a rack of mutton dry-roasted, with a leash of nightcaps on his head like the pope's triple crown, and as many pillows crushed to his back."

George Farquhar, the dramatist, in one of his poems speaks more hopefully to one who has been in the "powd-ering tub."

You will revive, the pox expire,
 Then rise like phoenix from the fire.
 The metal's stronger that's once soldered,
 And beef keeps sweeter once 'tis powdered.

Many of my quotations speak of a "Cornelius tub," or Cornelius's tub. How the name came to be applied, or who Cornelius was, I have been unable to discover. Sometimes it is "Cornelius's dry-fat," but a dry-fat, or a dry-vat, is an old-fashioned name for a box or cask.

In Armin's Nest of Ninnies, 1608, one says of the students:

"And when they should study in private with Diogenes in his cell, they are with Cornelius in his tub."

It was natural that the old story of Diogenes and his tub should present an opportunity for the gibe of the satirist. In Cotgrave's English Treasury of Wit and Language, 1655, p. 221, is this epigram:

As for Diogenes, that fasted much,
And took his habitation in a tub,
To make the world believe he loved a strict
And severe life, he took the dyet, sir, and in
That very tub sweat for the French disease.
And some unlearn'd apothecary since
Mistaking's name, call'd it Cornelius tub.

How early the system of treating syphilis by sweating was introduced cannot, I suppose, be settled, but Rabelais has a characteristic reference to it, book II, chapter 2, which contains also a satisfactory explanation of how the sea was made and came to be salt. I quote Motteux's translation, which in this instance is exact:

"The earth at this time was so exceedingly heated that it fell into an enormous sweat, yea, such an one that made it sweat out the sea, which is therefore salt, because all sweat is salt; and this you cannot but confess to be true if you will taste your own, or of those that have the pox when they are put into a sweating; it is all one to me." This was written before 1532.

There is a curious example in connection with the diet of how an old system may put on a new birth. In 1817 a Frenchman named Gandy wrote a thesis in which he highly lauded the treatment of syphilis by the dry method, namely, dry food and but little of it. The treatise attracted but little notice, but about thirty years later this method of treatment was tried at the Hotel-Dieu of Marseilles with some success. It was called the Arabic method, as the secret of it had been communicated, so it was said, to the hospital surgeons by an Arab. The diet consisted exclusively of dry biscuits, nuts, dried almonds, figs and raisins. A tisan made from sarsaparilla, China root and cloves was

freely given, and a mercurial pill was administered thrice daily. The latest account of this treatment was written in 1860. Two hundred years before, the famous Mrs. Aphra Behn wrote what she termed "A letter to a brother of the pen in tribulation," and you will see how closely the descriptions agree as to the diet. The word *tabernacler* was applied to street preachers of the time, such as the notorious Orator Henley, who were accustomed to preach from a cask or tub:

Poor Damon! art thou caught? Is't even so?
 Art thou become a *Tabernacler* too?
 When sure thou dost not mean to preach or pray,
 Unless it be the clean contrary way:
 This holy time* I little thought thy sin
 Deserv'd a tub to do its penance in.
 O, how you'll for th' Egyptian flesh-pots wish,
 When you're half-famish'd with your lenten dish,
 Your almonds, currants, biscuits, hard and dry,
 Food that will soul and body mortify;
 Damned penitential drink, that will infuse
 Dull principles into thy grateful muse.

There is yet another powerful method of sweating which would have greatly pleased the late Doctor Hewson, the enthusiastic advocate of the dry-earth treatment. It is from D'Avenant's play of *The Wits*, 1636, Act IV, Scene 1:

Though I endured the diet and the flux,
 Lay seven days buried up to the lips like a
 Diseas'd sad Indian, in warm sand. whilst his
 Afflicted female wipes his salt foam off
 With her own hair, feeds him with buds of guacum
 For his sallad, and pulp of salsa for
 His bread; I say all this endur'd, would not
 Concern my face.† Nothing can decline that.

Salsa was probably *sassafras*, the Spanish name for which was *sassafras*.

I shall conclude these illustrations of the history of syphilis with one capital scene from *The Picture*, by Massinger, 1630, Act IV, Scene 2. Ubaldo and Ricardo are both in love with Sophia, who first listens to Ubaldo's account of his rival.

* Lent.

† Make me look concerned.

Sophia. How! is he not wholesome?

Ubaldo. Wholesome! I'll tell you for your own good; he is
A spittle of diseases, and, indeed,
More loathsome and infectious; the tub is
His weekly bath: he hath not drank this seven years.
Before he came to your house, but composition
Of sassafras and guaicum; and dry mutton
His daily potion; name what scratch soever
Can be got by women, and the surgeons will resolve you,
At this time, or that, Ricardo had it.

Sophia. Bless me from him!

Ubaldo. 'Tis a good prayer, lady,
It being a degree unto the pox.
Only to mention him; if my tongue burn not, hang me,
When I but name Ricardo.

After Ubaldo had been dismissed by Sophia, who is entertaining both him and his friend, Ricardo, with illusive hopes, Ricardo is introduced, and proceeds to traduce his friend, as follows:

Ricardo. He did not touch your lips?

Sophia. Yes, I assure you.

There was no danger in it?

Ricardo. No! eat presently

These lozenges of forty crowns an ounce,
Or you are undone.

Sophia. What is the virtue of them?

Ricardo. They are preservative against stinking breath
Rising from rotten lungs.

Sophia. If so, your carriage

Of such dear antidotes, in my opinion.
May render yours suspected.

Ricardo. Fie! no; I use them

When I talk with him, I should be poisoned else.
But I'll be free with you; he was once a creature,
It may be of God's making, but long since
He is turn'd to a druggist's shop; the spring and fall
Hold all the year with him; that he lives he owes
To art, not nature; she has given him o'er.
He moves like the fairy king, on screws and wheels,
Made by his doctor's recipes, and yet still
They are out of joint and every day repairing.

* * *

He's acquainted
With the green-water, and the spitting pill's
Familiar to him; in a frosty morning
You may thrust him in a pottle-pot; his bones
Rattle in his skin, like beans toss'd in a bladder.

If he but hear a coach, the fomentation,
The friction with fumigation, cannot save him
From the chine-evil. In a word, he is
Not one disease, but all; yet, being my friend,
I will forbear his character, for I would not
Wrong him in your opinion.

Distinct allusions to gonorrhœa are, as might be supposed, comparatively infrequent in the older dramatists, though common enough in the plays of the 18th century. How early syringes were employed in the treatment of the disease, I do not know, but in most of the instances in which they are named in the drama, "birding pills" are also spoken of, and the "green-water" is frequently alluded to. The term "bird" was a familiar one in those days to denote the venal fair who bestowed her favors, with their not infrequent penalties, upon all comers. The expressions "to go a birding," "birding pills" and "birding syringes," which are often used, have obvious meanings. What the "birding-pill" contained I cannot say, but it was probably composed of Chio turpentine; the "spitting-pill" of course consisted of mercury in some form, generally the old-fashioned blue pill. The "green-water" has a very interesting history. It was a decoction made from the herb clary, the *Salvia sclarea*. The various plants of the sage family have mostly disappeared from pharmacopœias, but they are still used in household medicine. Captain John G. Bourke, 3d Cavalry, in a recent article on the Folk-foods of the Rio Grande Valley, tells how he once arrived at a convent, hot, thirsty and exhausted, after a long ride, and was refused the cold water which he demanded. The good priest said that it was only Americans who would drink cold water when heated, and sent for some "*chié*" seeds and steeped them in water which became speedily mucilaginous. This was administered to him in small quantities, and he declares that its effect in removing his thirst and fever and restoring his voice was surprising. He did not know what plant the seeds came from. Now *chia* is the name given to the seeds of more than one species of wild sage, and it is a popular remedy in the form of a tea in the States on the Mexican border. The "green-water" of the poet was made from

the heads of the clary plant, and doubtless contained some mucilage from the seeds. As a demulcent it would rank with the barley water and flaxseed tea which are still ordered as diet drinks for the unlucky victims of "birding."

In the following passage from *The Chances*, 1621, III, 1, Don John has offended Dame Gillian, his old nurse, who retorts upon him thus:

Gillian. Well, Don John,
There will be times again when, "Oh, good mother,
What's good for a carnosity in the bladder?
Oh, the green water, mother!"

Don John. Doting take you!
Do you remember that?

Gillian. "Clary, sweet mother, clary!"

Fred. Are you satisfied?

Gillian. "I'll never whore again; never give petticoats
And waistcoats at five pounds a piece! Good mother!
Quickly, mother!" Now mock on, Son.

Later on Dame Gillian says of her hopeful charge:

He's ne'er without a noise of syringes
In 's pocket (those proclaim him), birding-pills,
Waters to cool his conscience, in small vials.
With thousand such sufficient emblems.—[III, 4.

The term "carnosity of the bladder" is significant of the supposed pathology of gonorrhœa.

Sage is also recommended as a spring medicine:

Now butter with a leaf of sage, to purge the blood;
Fly Venus and phlebotomy, for they are neither good."

—*Knight of the Burning Pestle*, III, 4.

There is an amusing passage in a play by Shadwell, *The Virtuoso*, 1676, which in a coarse way exhibits the manners of the time at the theatres. Speaking of certain young bloods, one says:

"Such as come drunk and screaming into a play house, and stand upon the benches, and toss their full perriwigs and empty heads, and with their shrill unbroken pipes cry, *Damme, this is a damn'd play. Prythee, let's to a whore, Jack.* Then says another with great gallantry, pulling out his box of pills, *Damme, Tom, I am not in a coudition; here's my turpentine for my third clap;* when you would think he was not old enough to be able to get one."—I, 1.

We complain somewhat in our own day of theatre ill

manners, but such an exhibition of insolent debauchery as that just quoted seems almost incredible. That it was not uncommon, even at a later period, is shown by a passage in the play of English Friar, by John Crowne, 1690, Act I, Scene 1, where Lord Stately says:

“Ay, there’s a folly reigns among us; your young fellows now are proud of having no manners, no sense, no learning, no religion, no good nature; and boast of being fops and sots and pox’d in order to be admired.”

Closing the references to the venereal disease with this quotation, I shall occupy a few moments more of your time with some passages illustrating what I have termed miscellaneous medical subjects.

The domestic treatment for hysteria, or fit of the mother, as they termed it, was not lacking in potency. In *The Magnetic Lady*, by Ben Jonson, 1632, V, 1, Item says:

What had she then?

Needles. Only a fit of the mother;

They burnt old shoes, goose-feathers, asafœtida,

A few horn-shavings, with a bone or two,

And she is well again about the house.

Here is a forcible application of the frequent term of “good surgery” as applied to the body politic. It is from *The Muse’s Looking Glass*, a play by Randolph, 1638:

The land wants such

As dare with rigour execute her laws;

Her fester’d members must be lanc’d and tented.

He’s a bad surgeon that for pity spares

The part corrupted till the gangrene spreads

And all the body perish. He that’s merciful

Unto the bad, is cruel to the good.

The pillory must cure the ear’s diseases;

The stocks the foot’s offences; let the back

Bear her own sin. and her rank blood purge forth

By the phlebotomy of a whipping-post.

Clysters are more often mentioned in French than in English plays. In a comedy published in Paris in 1683, termed *Le Mercure galant*, there is a droll name given to the apothecary. This functionary, as we know, was accustomed to carry his immense syringe duly charged and resting on an appropriate tray, with ostentatious publicity to the patient’s residence. Kneeling at the bedside while the

patient discreetly presented what an old writer terms "his back face," the compound, consisting mainly of starch and castor oil, was administered. In the play referred to, Oronte says (I give it in English): "Who is this man? Has he any calling?" M. Michaud, the man in question, replies: "Between ourselves, Sir, my grandfather was a kneeling musketeer" (*mousquetaire á genoux*). "What sort of a charge was that?" says the other. "Why," replies Michaud, "it is what the vulgar in their common language call an apothecary."

Florio in his Italian dictionary, 1578, referring to the well known story in Pliny's Natural History that the ibis gives himself a clyster and voids himself upwards, adds the embellishment that the bird uses salt water from preference, and that Hippocrates from watching his proceeding first learned how to give clysters.

A curious precaution seems to have been taken by certain careful fine ladies, previous to attending a long ceremony. The usher says:

Make all things perfect; would you have these ladies
They that come here to see the show, these beauties
That have been labouring to set off their sweetness,
And wash'd, and curl'd, and perfumed, and taken glisters
For fear a flaw of wind might overtake'em,
Lose these and all their expectations?—
Madams, the best way is the upper lodgings;
There you may see at ease.

—Humorous Lieutenant, I, 1.

The learned Porson was credited with the authorship of a bit of humor in mock Greek, familiar to us all in our student days, in which the proportion between the secretion of tears and of urine was nicely adjusted, an excess of the former diminishing the supply of the latter. There is a medical application of the same fancy in *The Scornful Lady*, of Beaumont and Fletcher, 1616, III, 2. An angry lover says:

But if I come,
From this door till I see her will I think
How to rail vilely at her; how to vex her,
And make her cry so much that the physician,
If she falls sick upon it, shall want urine

To find the cause by, and she, remediless,
Die in her heresy.

In that capital piece of fun, "Father Tom and the Pope," the priest, after many potations, is obliged to ask for a certain utensil which he denominates a "looking-glass." The term is not uncommon in the old plays, though its origin was not evident. A passage in one of Webster's plays, *The Thracian Wonder*, 1661, IV, 2, seems to offer an explanation:

Antonio. A looking-glass I say.

Claudio. You shall, sir, presently; there's one stands under my bed.

Antonio. Why, that's a jordan, fool.

Claudio. So much the better, Father; 'tis but making water in 't, and then you may behold your sweet phisnomy in the clear streams of the river Jordan.

There is, however, a different meaning given to it in a curious work written by a surgeon, namely *Festivous Notes to Don Quixote*, by Edmund Gayton, 1654, p. 236: "The men running to the close-stooles, the women to the looking or leaking-glasses."

The etymology of jordan is also uncertain. In old French, *jar* means urine, and in Armorican, *dourden*, and in analogous Welch *dur dyn*, have the same signification.

There is, I believe, still to be seen in the apothecaries' shops what is known as *sal prunella*, or alum-nitre, as it was sometimes called. It consists of nitrate of potassium chiefly, and was used as a remedy for a sore throat, small fragments of it being allowed to dissolve slowly in the mouth. In the following passage from *The Duchess of Malfy*, 1623, it is alluded to, coupled with a sneer at the loud-praying Puritans. It occurs in the fourth act of that very powerful tragedy, when amongst other tortures inflicted upon the unhappy duchess whose death has been determined upon, a "Masque of madmen" is introduced. One of them says: "Shall my 'pothecary outgo me because I am a cuckold? I have found out his roguery; he makes alum of his wife's urine, and sells it to Puritans that have sore throats with overstraining."

The allusions in the older writers to "casting the urine," uroscopy, as it is now the fashion to call it, and to the impudent rogueries of the quacks who flourished by it,

are too numerous to be taken up on this occasion. In like manner I must pass by the amusing tricks and impostures of the quack-salvers and mountebanks who figure so constantly in the plays of the seventeenth century. I cannot resist, however, giving one example of the latter which I am sure you will enjoy. It is from the play of *The Widow* by Ben Johnson and others, *circa* 1616, IV, 2. *Latrocinio*, the quack, happily named, is receiving his dupes and says:

You with the rupture there, *hernia in scrotum*,
Pray let me see you space this morning; walk, sir,
I'll take your distance straight; 'twas F. O., yesterday;
Ah, sirrah, here's a simple alteration!
Secundo grandu, ye F. U. already;
Here's a most happy change. Be of good comfort, sir;
Your knees are come within three inches now
Of one another; by to-morrow noon
I'll make 'em kiss and jostle.

Here, too, are some therapeutic and hygienic maxims for summer. This extract is from *Summer's Last Will and Testament*, by Nash, 1593. Orion, ruler of the dog-days, says:

While dog-days last the harvest safely thrives;
The sun burns hot to finish up fruit's growth.
There is no blood-letting to make men weak.
Physicians in their *Cataposia*
r. little *Elinctoria*
Masticatorium and *Cataplasmata*;
Their gargarisms, clysters and pitch'd cloths,
Their perfumes, syrups, and their triacles
Refrain to poison the sick patients,
And dare not minister till I be out,
Then none will bathe, and so are fewer drown'd.
All lust is perilsome, therefore less us'd.

Cataposia used to mean boluses, but strictly is anything to be swallowed. *Elinctoria* were medicines to be licked up.

The dog has been credited with an instinctive knowledge of physic and surgery, and his tongue, with which he licks his own wounds, is popularly supposed to have powerful curative virtue. The following verse is from *Flowers of Epigrammes*, by Timothy Kendall, 1577:

Fower properties praiseworthy sure,
 are in the dog no note:
 He keepes the house, he feares the thefe
 by barking with his throte.
 He plays well the Phisition,
 with licking tongue he cures:
 Upon his master till he stickes,
 and faithful fast endures.

In a play just quoted, *Summer's Last Will and Testament*, there is a longer account:

That dogs physicians are, thus I infer,
 They are ne'er sick but they know their disease.
 And find out means to ease them of their grief;
 Special good surgeons to cure dangerous wounds,
 For stricken with a stake into the flesh
 This policy they used to get it out:
 They trail one of their feet upon the ground,
 And gnaw the flesh about where the wound is,
 Till it be clean drawn out; and then, because
 Ulcers and sores kept foul are hardly cured,
 They lick and purify [them] with their tongue,
 And well observe Hippocrates' old rule,
 The only medicine for the foot is rest;
 For if they have the least hurt in their feet.
 They bear them up and look they be not stirr'd.
 When humours rise they eat a sovereign herb,
 Whereby what clogs their stomach they cast up;
 And as some writers of experience tell,
 They were the first invented vomiting.

In a passage which has been read you will remember that the irascible Antonio tells his surgeon who has decided that it will require forty days to heal his patient's wounds:

I have a dog shall lick me whole in twenty.

There is a story which Ricord delighted to tell as to his travels in Spain. He employed a farrier who also doctored horses, to attend to his team. The man refused any recompense on the ground that he could not accept a fee from a brother physician. In the *Musarum Deliciæ*, published in 1636, is this epigram:

A FARRIER PHYSITIAN.

A neate Physitian for a Farrier sends,
 To dress his horses, promising amends:
 No (quoth the Farrier), amends is made.
 For nothing do we take of our own trade.

An example of the prevailing belief in sympathetic remedies is to be found in the use of fox's lungs as a restorative in certain disorders of the respiration. Reynard is noted for his speed and endurance and consequent long-windedness. His odor seems to have been also thought efficacious. In *The White Devil*, by John Webster, 1612, IV, 2, is this:

Thou hast stain'd the spotless honour of my house
And frighten'd thence noble society;
Like those which sick o' th' palsy and retain
Ill-scenting foxes 'bout them, are still shun'd
By those of choicer nostrals.

Again in *The Devil's Law-case*, by the same writer, 1623, III, 3:

This is the man that is your learned council,
A fellow that will trowl it off with tongue.
He never goes without restorative powder
Of the lungs of fox in's pocket, and Malaga raisins
To make him long-winded.

Falstaff carried sugar candy for the same purpose.

In a play by Brome, *The English Moor*, 1659, I, 3, is this:

Milicent. Where be my bride-maids?

Tesly. They wait in your chamber.

Buzzard. The devil a maid's i' this but my fellow Madge the kitching maid, and Malkin the cat; a batchelor but myself and an old fox that my master has kept a prentiship to palliate his palsie.

Epitaphs abound in medical allusions but are foreign to the present subject, but I am tempted to quote one because of its neat description of two consecutive amputations for gangrene. It is, I suppose, still to be seen in Banbury Churchyard in England, and tells of a young man "who died by a mortification which seized in his toe (his toe and leg both being cut off before he died)."

Ah! cruel Death, to make three meals of one,
To taste, and eat, and eat till all was gone.
But know, thou Tyrant, w' th' last trump shall call,
He'll find his feet to stand, when thou shalt fall.

The lugubrious drawings of the Dance of Death, which were so popular about the period of the Renaissance, could be well illustrated by passages from the English poets.

The skeleton, and especially the skull, offered many temptations for moralizing. In *The Revenger's Tragedy*, by Tourneur, 1608, Vindici takes up the skull of a former mistress of his prince and says with bitter irony:

Here's an eye
Able to tempt a great man—to serve God.
A pretty laughing lip that has forgot how to dissemble.
Methinks this mouth should make a swearer tremble,
A drunkard clasp his teeth and not undo'em
To suffer wet damnation to run through 'em.

The term *grip*, which has become so familiar, was an oldtime name for Death, expressive of the suddenness with which he seized his prey. Here is an example of its use from a poem by Barnabe Googe. 1563:

So death our foe
consumeth all to nought;
Envyng these
with dart doth us oppress;
And that which is
the greatest grief of all.
The greedy Grip
doth no estate respect.
But when he comes,
he makes them down to fall.

In *Quentin Durward*, Sir Walter Scott, who was deeply read in the old poets, makes Le Balafre observe, in explanation of the dying wish of the Boar of Ardennes whom the former had slain: "Men have queer fancies when old Small-back is gripping them."

I shall close this rather desultory paper with an extract from the author from whom I have just quoted, Barnabe Googe. It describes in a fanciful but impressive way the contest between "Death our foe," and the rich man who is sailing at his ease on the sea of pleasure. The latter is well delineated, and his devotion to sensual enjoyments forcibly portrayed. Then begins the catastrophe:

But in the midst of all his mirth,
while he suspecteth least,
His happy chance begins to change
and eke his fleeting feast.
For death (that old devouring wolf),
whom good men nothing fear,
Comes sailing fast in galley black.

and, when he spies him near,
Doth board him straight, and grapples fast,
and then begins the fight.
In Riot leaps as captain chief,
and from the mainmast right
He downward comes, and Surfeit then
assailleth by and by:
Then vile Diseases forward shoves
with pain and grief thereby.
Life stands aloft and fighteth hard.
but Pleasure, all aghast,
Doth leave his oar, and out he flies—
then death approacheth fast,
And gives the charge so sore that needs
must life begin to fly,
Then farewell all; the wretched man
with carrion corse doth lye,
Whom Death himself flings overboard
amid the seas of sin.
The place where late he sweetly swam.
now lies he drowned in.

HYPNOTISM AND THE LAW.*

By CLARK BELL, ESQ., OF THE NEW YORK BAR.

THE questions arising in the criminal tribunals, of how far crimes actually committed, may be properly held to be due to hypnotic suggestion, are forced upon the attention of judges and medico-legal jurists by recent events, and it becomes an interesting inquiry to know just what has received judicial sanction, and how far the courts have recognized the existence of hypnotic suggestion as a fact bearing upon criminal responsibility, for acts committed in violation of penal statutes.

A few prominent cases have excited the attention of the professions of law and medicine.

1. The Bompard Case in Paris.
2. The Czynski case, in Munich.
3. The case of MacDonald (acquitted by a jury), who had shot Patton, arising in Kansas, and the trial and conviction of Gray, as accessory before the fact.
4. The Minnesota case.

It is not my purpose at this time to analyze these cases at all in detail, but they are cited to show the urgency and importance of considering the general proposition as to how far hypnotic suggestion is a legitimate factor in determining criminal responsibility.

The bench cannot be expected to conduct any experimental work in determining the limits of hypnotic suggestion.

Only a few members of the bar have given the matter special attention and study, and the moment has come when it is proper to call upon such students of the subject, of all professions as are accessible, for light upon a question of so much interest and moment.

*Read before the Section on Medical Jurisprudence of the American Medical Association, Baltimore, Md., May, 1895, and before the Medico Legal Society, June Meeting, 1895.

Invited by the officers of this section to address you upon this subject, I have thought views of others would be more valuable to you than my own, and I addressed the following inquiries to a few of the leading scientists who have studied the subject.

PSYCHOLOGICAL SECTION MEDICO-LEGAL SOCIETY,
57 BROADWAY, NEW YORK, March 4, 1895.

My Dear Sir—I will feel obliged if you give me your views as to the following questions regarding hypnotic suggestion:

1. Can crime be committed by the hypnotizer, the subject being the unconscious and innocent agent and instrument?
2. If the subject is unconscious and even unwilling, has the hypnotizer such power and domination over the hypnotized as could control action to the extent of the commission of crime?
3. Is it certain or possible to remove by hypnotic suggestion from the mind of the subject all memory of acts or occurrences which happen in the hypnotic state?
4. Would it be possible for a hypnotizer to so control a hypnotized subject as to, for example, make him (1) Sign a will in the presence of third persons, declare it to be his will, and to request them to sign as attesting witnesses, and be afterward wholly unconscious of the occurrence; (2) Or a note of hand, or a check?

I will feel obliged for an early reply.

Faithfully yours,

CLARK BELL.

Prof. G. Stanley Hall, the talented and accomplished professor of Clark University, at Worcester, Mass., and the editor of the *Journal of Psychology*, replies as follows:

CLARK UNIVERSITY, WORCESTER, MASS., March 7, 1895.

DR. CLARK BELL,

Dear Sir:—In answer to your questions, I would say that my own experience with hypnotism, which was quite extended while I was at the Johns Hopkins, leaves no shadow of doubt but that a hypnotic subject can be made an unconscious and innocent agent of crime. Signing away of money has been done in France, and rapes have been committed. The penal code has been modified in important respects to meet such cases. All memory is sometimes removed from the subject mind, but not always.

I am, very truly yours,

G. STANLEY HALL.

Prof. J. Mark Baldwin, of Princeton University, and one of the editors of the *Psychological Review*, says, in response to the questions:

1. "Yes, I think so; the particular crime depending upon the mental and

moral habits of the subject; each subject's suggestibility for crime seems to have its limits, at which he resists and refuses the suggestion."

To the second question he replies,—

"Not generally, although the subject may hesitate and make an apparent effort to resist, and then finally follow out the suggestion."

To the third question he says,—

"Yes, indeed, such forgetfulness, after the subject returns to his normal state, is the regular phenomenon, not requiring any special suggestion." He adds, "the word 'certain,' in this question, is slightly ambiguous."

To the fourth question, as to both its first and second subdivision he replies,—

"Yes, to each."

Prof. George Trumbull Ladd, of Yale University, is unwilling to make a brief categorical answer to the questions; his letter, however, is of interest.

YALE UNIVERSITY, NEW HAVEN. March 7, 1895.

MR. CLARK BELL.

Dear Sir:—The phenomena brought under the title of "Hypnotism," are so multiform and uncertain that I should not dare rest my professional reputation by giving brief, categorical answers to the questions you ask.

I have studied the subject largely and have repeatedly lectured upon it, and so should not speak wholly without evidence. But if you desired detailed and carefully guarded answers, I have not just now time and strength to give to the subject.

Yours sincerely,

GEORGE TRUMBULL LADD.

Dr. George Frederick Laidlaw, who has given the subject special attention, replies as follows:

NEW YORK, February 19, 1895.

Dear Mr. Bell:—In response to the questions submitted, in note received to-day, I reply as follows:

1. Crime can be committed by the hypnotizer, the subject being the unconscious and innocent agent and instrument.
2. The operator usually can control the subject in conscious state only by a previous hypnotic sleep, in which suggestions were given to be carried out when subjects became conscious.
3. The subject rarely or never remembers what has passed during the hypnotic trance. He will certainly forget the occurrences if ordered to do so.
4. If the operator had the subject in a hypnotic state he could compel the signing of papers, which act would be unknown to the subject. It is usually necessary to give verbal directions, and this would arouse the suspicions of the witnesses. The thing might be done by impressing the man that he was about to die and must draw up his will, sign, and ask witnesses to sign, and then let him go ahead.

Yours very truly,

GEO. FRED. LAIDLAW.

Dr. R. J. Nunn, of Savannah, Ga., one of the vice-chairmen of the Psychological Section of the Medico-Legal Society, and who some years since made extended experiments in this field of inquiry, replies as follows:

SAVANNAH, GA., March 5, 1895.

My experience, limited, to be sure, would lead me to answer all the questions in the affirmative.

Faithfully yours,

R. J. NUNN.

Dr. D. R. Brower, Chairman of the Committee of the Section of Medical Jurisprudence of the American Medical Association, in reply to the question, writes as follows:

RUSH MEDICAL COLLEGE, CHICAGO, April 13th, 1895.

HON. CLARK BELL.

Dear Sir:—The questions you ask are difficult of answer without much explanation.

As to the first question, I do not believe that a person without criminal proclivities well marked could be, because:—1st. A person cannot be hypnotized against his will; and 2nd. A person so hypnotized is not absolutely, and in all things, under the dominion of the will of the hypnotist.

These two statements accepted, I think, throws hypnotism out of criminal jurisprudence.

Yours very truly,

D. R. BROWER.

REVIEW OF CASES.

THE BOMPARD CASE.—I have not time within the scope of this journal to review in detail this celebrated case, but am inclined to believe that the general impression of scientists, who have carefully studied it, agree that hypnotic suggestions did enter largely into the crime itself, in this instance.

The case of Czesław Lubicz Czyski has excited very great public interest. He was born in Turenk, Poland, and comes from an old Polish family. In 1890 he was a teacher of the French language in Cracow, Austria. Turning his attention to hypnotism, he went to Paris and began giving public hypnotic exhibitions, against a strong public prejudice existing in many European states. He was expelled from Bosen by the police, and resided in Dresden, where he met the Baroness Hedvig von Zedlitz, a very wealthy, high-respected and religious woman of thirty-eight years, who responded to his advertisement, and whom he treated for her malady by hypnotic treatment, to which she submitted under his advice. This treatment, at first, was by touching with his hands the parts of her body where the sources of her illness was located, viz.: the head and the stomach.

It lasted for several months, during which time their relations became more intimate and Czynski suggested to her, after he had placed her in the hypnotic sleep, love to himself. He represented to her that he was the last descendant of an old Lithaais ducal family, and for that reason their engagement and the subsequent marriage must be kept private. She followed his advice and the suggestions, and a false marriage was performed by a friend of Czynski, who personated a priest. He also made her believe that she was born to save his soul, and he undoubtedly, by hypnotic suggestions, controlled all her actions so far as the consent to that marriage and the relations which existed between them. He was arrested, Feb. 16, 1894, and was tried at Munich, Bavaria, Dec. 17, 1894. His trial lasted three days, and created a profound sensation throughout Europe. He was found guilty, convicted and sentenced to three years in prison.

THE KANSAS CASE of MacDonald, acquitted by a jury upon the charge of the murder of Patton whom he shot, and the trial and conviction of Gray, as an accessory before the fact, has excited great public interest. The newspaper press having very generally asserted that MacDonald was acquitted, and Gray convicted, on the ground that Gray had controlled MacDonald by hypnotic suggestions and influence over him to commit the act.

This case, however, has been misrepresented. Through the courtesy of Chief Justice Horton, of the Supreme Court of that State, I have been placed in communication with counsel for the defense of both Gray and MacDonald. Hon. J. V. Beckman, of Topeka, Kansas, wrote me as follows, in reference to the defense of MacDonald:

Dear Sir —Your communication of the 31st ult., relative to the acquittal of MacDonald, charged with the murder of Patton, received and contents noted.

The defense of MacDonald was made on three distinct propositions. First: There were aggravating circumstances which tended to provoke MacDonald, which the jury was asked to consider. Second: The hypnotic period in the history of the homicide, in which the mind of MacDonald seemed to be entirely swallowed up and completely controlled by the mind of Anderson Gray, the accessor before the act. Third: MacDonald acted in self defense.

In my judgment the jury acquitted MacDonald because they believed he was controlled and influenced by Gray. MacDonald is a young man, twenty-one years of age; Gray is fifty-four years of age, and a positive, aggressive, dictatorial sort of a man, and exercised much influence in the community where he lived.

There was no expert testimony introduced. The court did not instruct the jury as to hypnotic influences, but the defense went into great detail in showing the successive circumstances which went to show Gray's influence and control over MacDonald.

I have not the time just now, being busily engaged in the legislature, to give the details of the case. At some future time I shall take pleasure in accommodating you.

Yours respectfully,

J. V. BEEKMAN.

Gray was defended by James Lawrence, Esq., W. W. Schwinn, Esq., of Wellington, Kansas, and Mr. Stanley, and the county attorney was assisted by Mr. Elliott, one of the leading criminal lawyers of that State.

The case of McDonald was tried first.

Mr. James Lawrence replied to my letter on the subject, as follows:

Dear Sir.—Your letter dated Jan. 1st. addressed to myself and W. W. Schwinn, of this place, was received in due time, and would have been answered had I not been away from home. Mr. Schwinn and myself assisted Mr. Stanley in the defense of Mr. Gray. Under the statutes of this State the accessory may be tried before the principal, which was done in this case. It was never intended by the State to convict MacDonald, but they went through a farce of a trial. The word hypnotize was not used, nor was it even suggested in the trial of Gray that he had hypnotized MacDonald. In opening the case, one of MacDonald's attorneys did say, however, that the influence of Gray over MacDonald amounted almost to hypnotism. No evidence was offered on the subject whatever, nor did it cut any figure whatever in the trial of the case. It would be impossible for me to send you one of the copies of the evidence, for reason that there are 1200 pages of the same, closely typewritten; but if I could send it to you, you would not find anywhere in the evidence or record the word hypnotize, nor anything like it; nor was it ever suggested, excepting as I have above indicated, that MacDonald was hypnotized. Gray's case has been appealed to the Supreme Court, and will be heard March 7th.

Yours respectfully,

JAMES LAWRENCE.

He subsequently wrote me further, as follows:

I notice the statements made to you by the attorneys of the defendant in regard to hypnotism. I again repeat that the record does not show that there was one word said about hypnotism, and the word cannot be found anywhere in the evidence. The whole burthen of the defense, in their argument and in their presentation of the case to the jury, and also in the manner that the testimony was presented to the jury, was upon the theory that MacDonald killed Patton in self-defense, and the instructions asked for upon the part of the defendant show the same defense. The word hypnotism

never was uttered during the trial of Mr. Gray. I send you, by this mail, our printed brief in the Gray case, which contains a correct history of the case and calls attention to the errors of which we complain, and you will see by it that the word hypnotism does not appear in the case. It was argued in the Gray and also in the MacDonald case that MacDonald was persuaded to commit the deed by Gray, and MacDonald's testimony in the Gray case tended to establish that fact, as you will see from an examination of our brief, on pages two and three.

Yours respectfully.

JAMES LAWRENCE.

I have examined the brief on appeal, and it certainly sustains Mr Lawrence's assertion. I have also seen the letter signed by Hon. J. A. Burnett, the presiding judge of the court, before whom MacDonald was tried, published in the *American Lawyer*, which asserts the following:

"Question of hypnotism never was raised, never was insisted upon, either in the evidence, the arguments or the instructions. In the opening statement for the defense, one of the attorneys, in describing the relative responsibility of the two men, discussing the question of Gray's influence over MacDonald, Gray being a man about fifty-seven years of age and the owner of a large farm, and a man of independent will and indomitable energy, and MacDonald being a boy of easy-going disposition and about twenty-one years of age, and in the employ of Gray—in discussing that question before the jury, as I said, counsel for the defense, said that we might almost say that Gray possessed a hypnotic power over MacDonald, and that was the only reference, either direct or remote, during the whole trial, that was made to the question of hypnotism."

The *Kansas City Journal*, in commenting upon the decision of the Supreme Court, affirming the verdict of the jury, says that chief Justice Horton, of that bench, had stated "that hypnotism was not in any way whatever an element of the case," and the conviction of Gray was based upon the evidence of McDonald, which clearly justified the jury in finding that he was an accessory in the killing before the fact; so the Kansas case must be dismissed from the consideration of the subject.

THE MINNESOTA CASE.—I have not been able to investigate the details of this case, but I think the view taken by H. Merriman Steele Esq., in the April number of the *North American Review*, the safe one to follow, and that it would be quite outside of any legal experience to accept, as entitled to any credit, the "waking story" of murder committed by the accused while under hypnotic influence. Such

statements should be entitled to no credit, and I know of no authority which would justify the position that the subject, on awakening from hypnotic trance, could remember all or relate anything done while under hypnotic influence; and it would be a very unsafe proposition of law in regard to testimony, to place a witness in a hypnotic trance, and to accept as truth the statements of events that he in that state described as having occurred at a previous time.

On the same subject, Thomson Jay Hudson, Esq., of the Washington bar, author of the *Law of Psychic Phenomena*, and other works, has contributed a valuable paper upon the *Legal Status of Hypnotism in Medical Jurisprudence*.

Hudson adopts Bernheim's definition of hypnotism "as the induction of a peculiar physical condition, which increases the susceptibility to suggestion," with one modification, viz.; substituting the word "induces" for "increases."

Hudson accepts Liebault's views as now universally received of the law of suggestion among scientists with a few important exceptions.

This Law is stated as follows:

"Persons in a hypnotic state are constantly amenable to control by suggestions."

Mr. Hudson combats the view of the Charcot school, who claim that hypnotism can only be induced in hysterical persons, and adopts the contrary view, which is fast becoming universal among those who have investigated this subject.

He claims that hypnotism has no legitimate place in criminal jurisprudence, and while he concedes "that a criminal hypnotist, in control of a criminal subject, could undoubtedly procure the commission of a crime under exceptionably favorable circumstances," he illustrates that it practically in such a case would not be a legal defense on the ground: (a) Because, in the nature of things, a hypnotized subject can have no standing in a court justice, as a witness. (b) The cross-examination of a subject as to the nature and extent of the suggestions made to him by the hypnotizer would be quite impossible and absurd.

Jas. R. Cocke, M. D., in a recent work published by the Arena Publishing Co., Boston, speaking upon this subject, says, "I personally do not believe that the average individual in the hypnotic state could be made to commit crimes," and quotes Prof. James, of Harvard as stating:

"That while for a time the will and other faculties are in abeyance, they are not wholly extinguished, and if that commend is very repugnant to the hypnotized subject, he will not get beyond certain limits of its execution."

He cites an interesting experiment of a young girl

thoroughly hypnotized, who could not be induced to stab a man with an actual knife, when commanded to do so, and he asserts in some thirty or forty experiments with different people, he had always similar results.

The object of my paper is to open the discussion and the investigation of this very interesting subject, brought so forcibly on public, professional and judicial attention. I shall continue my researches during the summer vacation, and resume the subject at the Medico-Legal Congress, which is to be held in the City of New York, on the fourth, fifth and sixth of September. I shall be glad to avail myself of the experience of the medical profession upon the questions before that time, and invite correspondence.

IS THE RACE DEGENERATING?*

A Critique of Nordau's Theory.

By JAS. G. KIERNAN, M. D., Chicago.

Fellow of the Chicago Academy of Medicine; Professor of Mental Diseases, Milwaukee Medical College; Professor of Forensic Psychiatry, Kent Law School.

THERE is, as Macaulay remarks, a psychological law by which society constantly moving forward with eager speed is as constantly looking backward with tender regret. These two propensities spring from impatience with the existing state. The people are under a deception similar to that which misleads the traveler in the Arabian desert. Beneath the caravan all is dry and bare but far in advance and far in the rear is the semblance of refreshing waters. The pilgrims hasten forward and find nothing but sand where an hour before they had seen a lake. They turn their eyes and see a lake where an hour before they were toiling through sand. A similar illustration seems to haunt nations through every stage of the long progress from poverty and barbarism to the highest degree of opulence and civilization.†

From this springs the myth of the "golden age" thus stamped as truth in that ghastly swan-song of senile pessimism, "Locksley Hall Sixty Years After."

"Evolution ever climbing after some ideal good,
And Reversion ever dragging Evolution in the mud."

Such pessimism eminently suits the egotism which prefers degeneration from a high, to advance, from a low ancestry.

This old egotism was stimulated from an unexpected quarter. The great glory of the late eighteenth and early nineteenth centuries was the desire to help man by dis-

* Discussion before the Chicago Academy of Medicine, September, 1895.

† History, Vol. II

covery of the causes of misery with a view to removal. Defective man assumed the scientific importance taught by the Founder of Christianity in his labors among wine-bibbers, publicans, sinners and Magdalens whom eighteen centuries after his birth the world still treated only by crime creating repressive law.

Animated by this spirit, Elizabeth Fry and John Howard studied criminals; Chiarrurgi, Pinel, Tuke, Conolly and Dorothea Dix, the insane; Abbe Sicard the deaf mute; Itard, Seguin and Wilbur the idiot, and Howe the blind. Through these the scientific spirit which must underlie all continuous movement for advance was decidedly stimulated. The truth of the biblical doctrine that the "fathers have eaten sour grapes and the children's teeth are set on edge" was demonstrated as never before. The born criminal, pauper, inebriate, "bleeder," gout afflicted, deaf mute, hysteric, epileptic, lunatic and idiot were found to be buds of the same tree stamped with physical and mental evidence of their degenerate state. So frequently did the genius possess the same defect that he was considered another product of degeneracy all the more readily because of the old doctrine which Horace borrowed from Aristotle, and Dryden voiced in the epigram that:

Great wit to madness nearly is allied,
And thin partitions do their bounds divide.

Ere the 17th century, moreover, the fact that mental and moral defect expressed itself in physical stigmata was recognized and even the term was used. Thistleton Dyer remarks* that: "It was an old prejudice which is not quite extinct that those who are defective or deformed are marked by nature as prone to mischief." Thus in King Richard III, (i.3) Margaret says of Richard:

"Thou elvish-mark'd abortive rooting hog,
Thou that was seal'd in thy nativity,
The slave of nature and the son of hell."

She calls him hog in allusion to his cognizance which was a boar. A popular expression in Shakespere's day for a deformed person was a "stigmatic." It denoted anyone

* Folklore of Shakespere.

who had been stigmatized or burnt with iron (an ignominious punishment), and hence was employed to represent a person on whom nature had set a mark of deformity. Thus in Henry VI (ii.2), Queen Margaret says:

“But thou art neither like thy sire nor dam,
But like a foul misshapen stigmatic
Marked by the destinies to be avoided,
As venom toads’, or lizards’ dreadful stings.”

Again in 2 Henry VI (v.1) young Clifford says to Richard: “Foul stigmatic that’s more than thou canst tell.” We may note too how in “A Midsummer Night’s Dream” (v.1.) mothers’ marks and congenital forms are deprecated by Oberon from the issue of the happy lovers:

“And the blots of Nature’s hand
Shall not in their issue stand;
Never mole, hare-lip nor scar,
Nor mark prodigious, such as are
Despised in nativity,
Shall upon their children be.”

Indeed, constant allusions are to be met in our old writers relating to this subject showing how strong were the feelings of our forefathers on the point. But to give one further instance of this superstition given by Skakespeare, we may quote the words of King John (iv.2) with reference to Hubert and his supposed murder of Prince Arthur:

“A fellow by the hand of nature mark’d
Quoted and sign’d to do a deed of shame
This murder has not come into my mind.”

This adaption of the mind to the deformity of the body concurs too with Bacon’s theory: “Deformed persons are commonly even with nature, for as nature hath done ill by them so do they by nature, being void of natural affection, and so they have their revenge on nature.”

One expression of these labors is the indictment against the race luridly drawn by Nordau, lucidly by Moreau de Tours, Hagen, Nisbet and Lombroso. It seems crushing in its logic. When seemingly scientific data and popular pessimism combine, most thinkers are dominated. The Chicago poet, artist of child life, Eugene Field, is so swayed by Nordau’s logic as to ignore the fact that the

latter's characterization of ballad refrain as "insane tic," places most English speaking poets (Field not excluded) among the degenerates. To the scientific mind, a pessimistic theory in which cant and science combine in unhallowed union is suspicious. The test that any true theory will explain all facts and exclude all other theories is immediately applied. Tried by this principle, does the evidence prove that the race is degenerating?

As Nordau's literary tests of degeneracy have been accepted even by literati like Eugene Field, the question of their validity naturally arises. Nordau sets up one test by quoting Sollier to the effect that idiots insert words which have absolutely no connection with the subject and that in idiots constant repetition grows into veritable tic. Nordau cites in illustration of this, a stanza from Rossetti, containing a refrain.*

This "insane tic" appears in Sir Walter Scott, Shakespeare, Goethe, Burns, Whittier, Campbell, Tennyson and others. It has been always a feature of ballad poetry. The philistine in Nordau is here obvious. He displays the atavistic tendency to consider what is superficially analogous as identical. He totally ignores the truth laid down by Poe that "the poetry of words is the rhythmical creation of beauty whose sole arbiter is taste. With the intellect or with the conscience it has only collateral relations. Unless incidentally it has no concern whatever with duty or truth. It by no means follows, however, that the incitements of passion or the precepts of duty or even the lesson of truth may not be introduced into a poem and with advantage, for they may subserve incidentally in various ways the general purpose of the work, but the true artist will always contrive to tone them down in proper subjection to that beauty which constitutes the atmosphere and the real essence of the poem." That beauty is subserved by the ballad refrain is undeniable. Its wide-spread use denotes popular poetic recognition of this fact. Confusion of this refrain with the meaningless tic of idiots betrays the tyro in psychiatry and the philistine in poetic art. The two differ in kind. This is a fair sample of

* Degeneration.

the deficiency in psychological insight with which Nordau approaches his task. Rossetti, viewed from the standpoint of his poesy, is not a degenerate but a natural expression of his environment. He may be out of accord with the Shemitic money changers whence Nordau arose, but he is a natural healthy product of the English race. The question moreover arises whether judgement of an author's mentality by his work be justifiable. Lombroso* himself decides this point against Nordau. The elder Disraeli† asks in this connection:

"Are the personal dispositions of an author discoverable in his writing as those of an artist are imagined to appear in his works where Michael Angelo is always great and Raphael ever grateful? Is the moralist a moral man? Is he malignant who publishes caustic satires? Is he a libertine who composes loose poems? And is he, whose imaginations delights in terror and blood, the very monster he paints? Many licentious writers have led chaste lives. La Mothe le Vayer wrote two works of a retired sage. Bayle is the too faithful compiler of impurities, but he resisted the voluptuousness of the senses as much as Newton. La Fontaine wrote tales fertile in intrigues, yet the 'bonhomme' has not left one record of a single ingenious amour of his own. The Queen of Navarre's Tales are gross imitations of Boccaccio's, but she herself was a princess of irreproachable habits and had given proof of the most rigid virtue, but stories of intrigue told in a natural style formed the fashionable literature of the day and the genius of the female writer was amused in becoming a historian without being an actor. Fortiguerra, the author of the Ricciardetto, abounds with loose and licentious descriptions and yet neither his manner nor his personal character were stained by the offending freedom of his inventions. Smollett's character is immaculate yet he has described two scenes which offend even in the license of imagination. Cowley who boasts with such gaiety of the versatility of his passion among so many mistresses wanted even the confidence to address one. Thus licentious writers may be very chaste persons. The imagination may be a volcano while the heart is an Alp of ice."

* *Century*, October, 1895.

† *Miscellanies of Literature*.

Researches among prostitutes show that their favorite literature is sentimental not pornographic.

Rapid purposeless changes of occupation, under certain conditions are admitted evidence of insane tendencies. The question must not be judged from the standpoint of change alone, Lombroso remarks that: Walt Whitman* is the creator of a poetry without rhyme or rhythm, vaunted by the Anglo-Saxons as the poetry of the future, which is not destitute of wierd wild originality. In Walt Whitman, Lombroso finds insane tendencies manifest in his change of career; he was a printer, school teacher, soldier, wood-cutter and even, strangely enough for a poet, an office-holder. That Walt Whitman's changes of career were normal for an American, Australian, Canadian, South African or British Indian, no Anglo-Saxon can deny, yet Nordau brusquely asserts: "This constant changing of his profession, Lombroso rightly characterizes as one of the signs of mental derangement. A French admirer of Whitman palliates this proof of organic instability and weakness of will in the following manner: 'This American facility of changing from one calling to another goes against our old European prejudice and our unalterable veneration for thoroughly hierarchical bureaucratic routine careers. We have remained in this as in so many other respects essentially narrow minded and cannot understand that diversity of capacities gives a man a very much greater social value.' This is the true method of the æsthetic windbag who for every fact which he does not understand finds roundly turned phrases with which he explains and justifies everything to his own satisfaction."

By one acquainted with Anglo-Saxon history, Nordau's attack on the Frenchman could not but be regarded as egomaniacal were it not the pure ex-cathedra style of the newspaper sensation-monger, whose evolution of "science" from his internal consciousness has been detected. Nordau is so singularly ignorant of the Anglo-Saxon race as to treat the religious movements, not as protests of healthy individualism against petrifying state socialistic cant, but as products of caste seeking to use moral restraint in lieu of physical

* *Alienist and Neurologist*, July, 1891.

force for control of the masses. All through the Lombroso-Nordau philosophy runs this error of making absolute rather than relative tests, as I have repeatedly pointed out.* What vitiates many deductions as to degeneracy is the tendency to regard degeneracy of an organ as an expression of general degeneracy. Evidence that disuse of organs has occasioned their degeneration will not suffice. This, as embryology demonstrates, may be evidence of advance. The human jaw, considered from the standpoint of a weapon and of food manipulation, has degenerated, yet æsthetically has improved from greater mental advances. The loss of two incisors and the approaching loss of the wisdom teeth is not an expression of degeneracy but of progress in evolution.

Nordau's newspaper-like ignorance of psychiatry, is excellently illustrated in his criticism of Ibsen:†

"Oswald Alving's illness in *"Ghosts"* is from a clinical standpoint quite as childishly depicted as that of Rank. From all that is said in the piece, the disease inherited by Oswald from his father can only be diagnosed either as syphilis hereditaria tarda or dementia paralytica. The first of these diseases is out of the question for Oswald is depicted a model of manly strength and health and even if in an exceptional and extremely rare case the malady does not show itself till after the victim is well on in his twenties, it yet betrays itself from the earliest childhood by certain phenomena of degeneracy, which would prevent even a mother, blinded by love and pride, from glorifying her son's outer self in the style of Mrs. Alving. Certain minor features might perhaps indicate dementia paralytica, as, for example, Oswald's sensual excitability, the artless freedom with which he speaks before his mother of the amours of his friends in Paris or gives expressions to his pleasure at the sight of the glorious Regina, the levity with which at the first sight of this girl he makes plans for his marriage, etc. But, together with these exact though subordinate features, there appear others infinitely more important which, wholly preclude the diagnosis of dementia paralytica. There is in

* *Allenist and Neurologist*, 1891-2-3.

† *Degeneration*, p. 353.

Oswald no trace of the megalomania which is never absent in the first stage of this malady, he is anxious and depressed while the sufferer from general paralysis feels extremely happy and sees life through rose colored spectacles. Oswald forebodes and dreads an outburst of madness, a fact which I for my part have never observed in a paralytic nor found indicated by any clinicist whatever. Finally Oswald's dementia declares itself with a suddenness and completeness found in acute mania only, but the description given of Oswald in the last scene, his immobility, his dull and toneless voice, and his idiotic murmuring of the words, the sun, the sun, repeated half a dozen times, does not, in the remotest degree, correspond with the picture of acute mania."

Every alienist clinician must, from such a criticism, regard Ibsen as the alienist and Nordau as a sensation-monger like the newspaper authority on Chinese metaphysics of "The Pickwick Papers," who "read up" for China under the letter "C" in the encyclopedia and for metaphysics under the letter "M" and combined his information.

To trust such an "alienist" to pronounce unchallenged the doom of the race is too much of an insult to the world of psychiatry. His tests when correct are not comprehended by him. When incorrect are valueless. The matter is not one for phrase-mongering but a serious question for actual analysis.

The question turns on the defective classes. It must be shown that there has been an increase in these classes, not due to increased skill in defect recognition. Do races typical of modern civilization show such increase? The United States furnish a fair criterion. From their earliest colonization the defective classes poured into the United States. Even the Puritan settlement bought "sturdy beggars," criminals and other defectives from the crowd of offenders sent as servants to "his majesty's plantations." Large numbers of criminals were found "not guilty if they left the state" for New England. The stir of the west attracted hysterics, paranoiacs and other defectives, as lighthouse lanterns do birds. The hysterical, false paralytic was far from infrequent among Puritan women. Like her

descendent, she was often a living evidence of faith cure. Such women are usually claimed as *fin-de-siècle* products. John Eliot, the apostle to the Indians, described in 1633 the case of Mary Chase "who had a paralitik humor which fell into her backbone so that she could not stir her body but as she was lifted, and filled her with great tortuer and caused her back to goe out of joint and bunch out from ye beginning to the end with which infirmity she lay four years and a half and a great part of the time a sad spectacle of misery. But it pleased God to raise her again and she bore children after it." This case when laid before Dr. Oliver Wendell Holmes produced the following diagnosis: "I do not want to say anything against Mary Chase, but I suspect that getting nervous and tired and hysteric, she got into bed, which she found very agreeable after too much housework and perhaps too much going to meeting, liked it better, curled herself up into a bunch, which made her look as though her back was really distorted, found she was cosseted and posseted and prayed over and made much of, and so lay quiet until false paralytiks caught hold of her legs and held her there. If some one had 'hollered' fire it is not unlikely that she would have jumped out of bed as many other such paralytiks have done under such circumstances. She probably could have moved enough if anyone could have made her believe that she had the power of doing it. *Possumus quia posse videmur*. She had played 'possum so long that at last it became non-possum.' "

Moreover Great Britain, whence most American settlers came, was already a racial hodgepodge ere the 17th century and had been a refuge for degenerates for centuries, as Defoe remarks*:

For Englishmen to boast of generation
Cancels their knowledge, and lampoons the nation.
A true-born Englishman 's a contradiction
In speech an irony, in fact a fiction.

* * *

And here begins the ancient pedigree,
That so exalts our poor nobility.

* True-born Englishman.

'Tis that from some French trooper they derive
 Who with the Norman bastard did arrive
 The trophies of the families appear
 Some show the sword, some the bow, and some the spear,
 Which their great ancestor, forsooth did wear,
 These in the herald's register remain
 Their noble mean extraction to explain,
 Yet who the hero was no man can tell,
 Whether a drummer or a colonel:
 The silent record blushes to reveal
 Their undescended dark original.

* * *

These are the heroes that despise the Dutch
 And rail at new-come foreigners so much:
 Forgetting that themselves are all derived
 From the most scoundrel race that ever lived:
 A horrid crowd of rambling thieves and drones,
 Who ransacked kingdoms and dispeopled towns.
 The Pict and painted Briton, treacherous Scot,
 By hunger, theft and rapine hither brought.
 Norwegian pirates, buccaneering Danes,
 Whose red-haired offsprings everywhere remains:
 Who joined with Norman-French compound the breed
 From whence your true-born Englishmen proceed.

* * *

And lest by length of time it be pretended
 The climate may this modern breed have mended
 Wise Providence, to keep up where we are,
 Mixes us daily with exceeding care,
 We have been Europe's sink, the jakes where she
 Voids all her offal outcast progeny
 From our fifth Henry's time the strolling hands
 Of banished fugitives from neighboring lands
 Have here a certain sanctuary found
 The eternal refuge of the vagabond.
 Wherein but half a common age of time,
 Borrowing new blood and manners from the clime,
 Proudly they learn all mankind to contend
 And all their race are true-born Englishmen.

The United States censuses prior to 1880 were very deficient as to the insane, who, as constant errors as to needed asylum provision showed, had been greatly underestimated. According to the very defective census of 1880, the insane were one in 543. The census of 1890, as to the defective classes, was under the supervision of the

ablest American statistician of these classes, Rev. Fred H. Wines. If the theory that the race degenerates be true, this census should show an enormous increase in the insane. The proportion was one in 583, a slight apparent but really enormous decrease. As shown by the increase in chronic insanity in Irish and other European asylums, the immigration laws excluded large numbers of defective classes during the decade.

The same is true of other defectives. Much has been said of an enormous increase of crime, yet European statistics show a decrease. Dr. Wines, after a careful study of the United States census of 1890, finds that there has been no substantial increase of crime between 1880 and 1890. While forced decrease in importation of defectives has affected the result slightly, still the home manufacture and propagation of defectives has clearly decreased. In other words, the race has here so improved that the United States have assimilated and approximated to normal the enormous mass of defective humanity poured into them for nearly three centuries.

The significance of this improvement can best be appreciated when it is remembered that the foreign-born hereditary lunatics constitute thrice the home proportion of the American insane. The descendant of these may be a lunatic, idiot, inebriate, pauper, epileptic, prostitute, hysteric, criminal, "bleeder" or so nearly return to the normal as to be merely a victim of hereditary gout.

Were genius an expression of degeneracy, this should be more demonstratable with increasing degeneracy of the race. Degeneracy, according to Nordau, is especially rife among German literati. According to Spitzka,* German literary statistics of morbidity give the following results:

Born before 1800, 1,805. Insane, 46; eccentric, 27; per 1,000 insane, 27; per 1,000 eccentric, 14; per 1,000 morbid, 42.

Born after 1800, 1,565. Insane, 18; eccentric, 13; per 1,000 insane, 8; per 1,000 eccentric, 8; per 1,000 morbid, 19.

When it is remembered that ere the nineteenth century,

* Amer. Journal of Insanity, July, 1895.

acts seemingly insane or eccentric had to be very decided to attract even notice, the optimism of the majority of alienists as to the future appears more than justified. If, under the severe mental standard of the nineteenth century, its proportion of morbid literati be less than one-half that of the preceding era, how much greater would the improvement of the race appear could comparison fair to the nineteenth century be made.

The question of life expectancy is a popular test of degeneracy. The one old man is remembered when the fifty dead infants are forgotten. Moral anæsthesia may produce one centenarian in a family of short lived degenerates. The longevity philosophy of Scott of the song of the "Bride of Lammermoor," is true in biology. The test of longevity of individuals *per se* is worthless as a test of degeneracy. The test as applied to a class is of scientific value. Salzman of Wurzburg,* who has studied the longevity of physicians, an excellent test in this matter, states that the average longevity of physicians has increased fully 50 per cent during the last 300 years. In the sixteenth century the average duration of life was only 36.5 years. During the seventeenth century it rose to 45.8. In the eighteenth century it went up to 49.8, and during the present century it has been at the very high figure of 56.7.

Another alleged evidence of degeneracy having popular weight is the decrease in the number of children born to a family. Fecundity is no evidence of advance. If it were, the codfish, with its million of young, would stand high in evolution. Fecundity is a feature of immature marriages and marriages among degenerates. Quantity interferes with quality; as animals rise in evolution, progeny are fewer, since longer periods of development are needed. France, so often cited as evidence of degeneracy in this particular, was drained of millions of men during the last two centuries. Napoleon directed the ablest, strongest men into the career of arms as "open to talents." Despite this terrible drain, the French increased, in contrast with the decrease in Ger-

* Medical Standard, Vol. XVI.

many after the thirty years' war, or in New Hampshire and Vermont after the war between the states.

Degeneracy, according to its advocates, also manifests itself in increased girl births and feminine addiction to masculine occupations. The first test is absurd, since animals are ranked by female characteristics, the female type being highest in evolution. The second test is admissible, but demarcation of male from female occupations is impossible. For centuries, while man was the hunter and warrior, woman was the farmer, toolmaker, carpenter, tanner, tailor, shoemaker and decorative artist. Every art of civilization originated with woman. When hunting and war ceased to be the chief male occupations, man intruded on arts created by woman. This Dr. Otis T. Mason, Curator of the Department of Ethnology, Smithsonian Institution, thus graphically describes:*

"Let us follow the savage woman through her daily cares in order that we may comprehend the significance of her part in the play. The slain deer lying before her cave or brush-shelter or wigwam shall be the point of departure in the enquiry. She strikes off a sharp flake of flint for a knife. By that act she becomes the first cutler, the real founder of Sheffield. With this knife she carefully removes the skin, little dreaming that she is thereby making herself the patron saint of all subsequent butchers. She rolls up the hide, dresses it with brains, smokes it, curries it, breaks it with implements of stone and bone with much toil and sweat until she makes her reputation as the first currier and tanner. With fingers weary and worn, with needle of bone and thread of sinew and scissors of flint, she cuts and makes the clothing for her lord and her family; no sign is over the door but within dwells the first tailor and dressmaker. From leather specially prepared, she cuts and makes mocassins for her husband. Out of little scraps of fur and feathers supplemented with bits of colored shell or stone or seed, she dresses dolls for her children, makes head-dresses and toggery for the coming dance, adorns the walls of her squalid dwelling, creating at a single pass a

* Woman In Primitive Culture.

dozen modern industries—at once toy-maker, milliner, modiste, hatter, upholsterer and wall decker. She was at first and is now the universal cook, preserving food from decomposition and doubling the longevity of man. Of the bones, she fabricates her needle and charms. From the grasses around her cabin she constructs the floor mat, the mattress, the screen, the wallet, the sail. She is the mother of all spinners, weavers, upholsterers, sail makers. Counting and varying stitches and adding bits of black, blue, red and yellow, on her textures she becomes the first decorative artist, she invents the chevrons, herring bones, frets and scrolls of all future art. To the field she goes with basket or wallet strapped across her forehead. By the sweat of her face she earns her bread and becomes the first pack animal that ever bent under a burden in the world. Home she comes with her load of acorns, roots, seeds, etc., and proceeds to crush them in a mortar or to roll them on a stone slab. Here she appears clearly as the primitive miller. Or perchance she lays her seeds in a flat tray and by help of wind or a hot stone removes the chaff. Here begins her first lesson in threshing. Perhaps with a stick hardened and pointed in the fire, she digs the roots from earth or tears away troublesome weeds from useful plants or digs a hole and drops the seed of pumpkin, gourds or maize therein. While we watch her working, we are looking at the first gardener, farmer and nurseryman. It may be that on some lonely plain or alluvial river bank there is no cave to shelter her and her babes. How long will it take this aforetime basket maker and leather worker to devise a shelter of grass or skin and thus become the architect primeval? The primeval woman was not a potter. It was not until near the polished stone age that she became the pristine plastic artist. This is true, however, that every form, decoration and function of pottery were invented by woman. In the struggle for existence which takes place among many occupations as among individual and species, militancy no longer demands all men's waking movements. The arts devised by woman are in the ascendancy and the man militant has glorified them by his co-operation. Her very ancient digging stick is

now a plough, her rude carrying-strap over her aching forehead is now the railroad train; her woman's boat the ocean steamer; her stone hand mill, the costly roller mill; her simple scraper for softening hides the great tanneries and shoe factories; her distaff and weft stick the power loom; her clay and smooth pebble, the potter's wheel; her sharpened stick and bundle of hairs are all the apparatus of the plastic and pictorial arts. In the early history of art, language, social life and religion, women were the industrial elaborative conservative half of society. All the peaceful arts of to-day were once woman's peculiar province. Along the lines of industrialism she was pioneer, inventor, author originator." Every period of advance has been marked by woman's appearance in the intellectual field. The rise of universities created women professors of law, medicine, literature and even theology, in the twelfth century. Fortunately for the intellect of the race, the "new woman" is an old phenomenon. Shelley voices race dependence upon the mother when he asks in "The Revolt of Islam."

Can man be free if woman be a slave?

The theory that the race is degenerating ignores the beneficent law that when evolution tends to the degenerate as the fittest to survive, reversion tends upward to restore the type. The animal "throws back" to its higher ancestor. Here appears the value of the mother, so much underrated by Darwin, Weissman and the Lombroso school.

Evolution in biology (an advance from the indefinite homogeneous to the definite heterogeneous with the loss of explosive force) consists in the creation of checks; these in man result in the creation of a secondary ego the source of all morality. So far as the race is concerned, the creation of this secondary ego is most important in woman. Checks will not be created when woman is secure in the "home," gynaeceum, or harem, from evil. Such seclusion destroys individuality, the source of all advance. This was excellently illustrated in his marriage by Goethe, who, herein, was as singularly illogical an evolutionist as Darwin. He recognized his mental debt to his mother who was the favorite of poets, princess, statemen and scientists, and the delight of children.

She had a strong instinct of self preservation, a dislike of emotionalism and caustic satire. Her mental combination hence was essentially that of the "new woman." Goethe, dominated by German cant, married his cook, a woman of inferior intellect (which naturally prevented any "new woman" tendencies) on the "home" principle. The cook's son by Goethe was of such narrow mind that Wieland used to call him the "scullion's son."

The Turks, just now decimating Armenia, compare badly with the New Jersey descendants of the mothers who voted for the first four decades of the republic until "smart" yankee immigration turned New Jersey into the railroad state of Camden and Amboy and created the unutterable rottenness of the Jay Gould jobs.

This individuality is the ennobling feature of the nineteenth century. Work once done under the autocratic state socialism of the ruler is now done through appeals to the self-interest of the individual workman. Even the miner, the worst paid and worst treated American laborer, unlike the British miner of the eighteenth century, can leave his employment without being arrested for so doing, or demand higher wages without being punished for conspiracy under judge-made law (based on the infamous serf-repressing "statue of laborers" fallen into desuetude for centuries), as was the New York carpenter of the first decade of the present century.*

The high status of woman and workman is a gauge of advance. Tried by this test, no century exceeds the nineteenth. Public spirit is higher now than in the first half of the present century. What were regular perquisites then are now stealings by what Macaulay called—

Boodle's patriot band,

Fat from the leanness of the plundered land.

Whether the stealing be done by the professional politicians (the tool and scapegoat) or the respectable "business" *deus ex machina* behind them. A noted American statesman and party god could sacrifice the honor

* Colliers and satlers were first exempted from the legal penalty consequent on leaving their masters by Act 15 George III, Chapter 28. Dewitt Clinton, then New York City Recorder, fined carpenters in 1809 for demanding higher wages.

of a married woman to save himself from a taint of boodle, yet be deified by the New England federalists and their descendants, while a modern political leader of power, eloquence and magnetism fell in 1894 into utter contempt for a less misdemeanor of a similar kind.

Careful study of degeneracy in the race, while it decreases reverence for the past, floods the future with the light of the glowing vision of Tennyson's evolutionist:

I have climbed to the snows of age, and I gaze at a field in the past,

Where I sank with the body at times in the sloughs of a low desire;

But I hear no yelp of the beast, and man is now quiet at last.

As he stands on the heights of life, with a glimpse of a height that is higher.

In other words, the race has not degenerated, but has begun to:

Move upward, working out the beast,

And let the ape and tiger die.

Discussions on Dr. Kiernan's Paper.*

By H. M. BANNISTER, M. D., Chicago.

There is no good reason to suppose that the race, at least our section of it, is degenerating at the present time. There may be more degenerate individuals but the general population has also increased. I believe the race type in America is higher than it was and that if we could compare the native Americans of European descent with their ancestors by modern methods and according to modern theories of degeneracy they would be found to be on an average a decidedly advanced or superior physical type. There are, it is true, some tendencies that are not altogether favorable such as that to the crowding of populations in cities but these are counteracted by others and the general result is the improvement of the race.

We can tell better how we stand in respect to this question in this country when it has been fully settled up and immigration has largely ceased. Some facts however are significant, the descendants of immigrants are, as a rule, physically superior to the immigrants themselves—there are certainly fewer pronounced degenerates among them and the same is true of the native stock. In some of the older sections of New England which have been drained of their best blood by immigration, and where those remaining have concentrated their heredity by inter-marriage, neurotics and degenerates are more common but even there the old stock keeps up its vitality and is constantly producing exceptionally superior individuals. In most parts of the country however degeneracy is not specially frequent in the native Americans and they are certainly not unduly liable to the

* Remarks on Dr. Kiernan's paper before the Chicago Academy of Medicine, September, 1895.

severer neuroses of the conditions that indicate a failure of the race. Taking insanity for example, we find that it is proportionally much less frequent in our native population than among foreigners. In this state one-third or perhaps nearly one-half of our insane are foreigners and in most European countries the ratio of insanity is higher than it is here. On the other hand for example, one county in this state, the population of which is said to be almost exclusively American (an exceptional one in this respect) was for years and I presume is still unable to more than half fill its quota in the asylums and those it did send were partly from its sparse foreign and colored population.

There have always been jeremiads about the physical defects of Americans and we can perhaps take some comfort in reading those of forty or fifty years ago and comparing them with what we can see about us at present. It is doubtful whether any such state of ill health in American women could be found at the present time as was described in the little book by Miss Catharine Beecher in 1856. In the beginning of the present century, drinking habits were almost universal and the change in this respect as far as it has occurred has been most beneficial to the race.

It ought to be understood that an apparent increase of nervous disorders especially of the so-called functional kind does not necessarily mean race degeneracy but may be simply an incident in race evolution. What may be called race progress has been recently and still exceedingly rapid and many of us do not adjust ourselves to it without suffering to some extent. A few break down altogether who in former times and under other conditions might have lived out an average quiet life. This I believe is the cause of much of the insanity of the foreign born in this country. Americans and the native born adjust themselves more rapidly to the conditions, and while they may be sometimes nervous they are all the while gradually developing into better type of manhood and fully holding their own mentally and physically in comparison with the other population of the civilized world. And while it may take time to tell what real American physical type will be evolved from all the peoples

and races that have settled the country there are no reasons at present visible to fear it will be an inferior one. As regards moral tendencies I also see no reason for taking a dark view of matters. We never were any too good but I believe we are getting better and with all respects to our forefathers collectively I believe they had in proportion as many vices as their decendents. Even the puritans had their faults and some of our ancestors were not puritans. While the vicious congregate in the great centers the best elements of society are there also. There is, moreover, a certain sort of demoralization in a new country that disappears with growth and social organization and in a large way our country is better morally, socially and politically than it could have been said to be forty, fifty or a hundred years ago and the improvement is still going on as it needs to badly enough yet in many sections.

As far as I have any right to indulge in literary criticism I would say that in literary taste also we are not degenerates. Nordau's sensational book does not give a fair picture of the tendencies of the time and his style seems to me that of a literary common scold. Very few of his readers had any acquaintance with many of the monstrosities he dissects before he introduced them. Verlaine, Nietzsche, Mallarme, et al, were and still are unknown to Americans, and others he mentions are properly estimated by their readers and harmless. As regards Nordau's criticism of Ibsen, some of it is unworthy of a physician, and while I am not an admirer of Zola, he seems to me to have been an infinitely better medical observer than Nordau, notwithstanding the medical profession of the latter. Nordau's book is not bad reading in its way but the impression it leaves me is that it was written to sell and I do not feel any assurance that it gives the honest sentiments of its author. More than any other work I have lately read it lacks that moderation and cautions would give.

E. S. TALBOT, M. D., D. D. S., Chicago.

The tendency in certain organs of the body to degenerate is well marked in the teeth and jaws. That man has

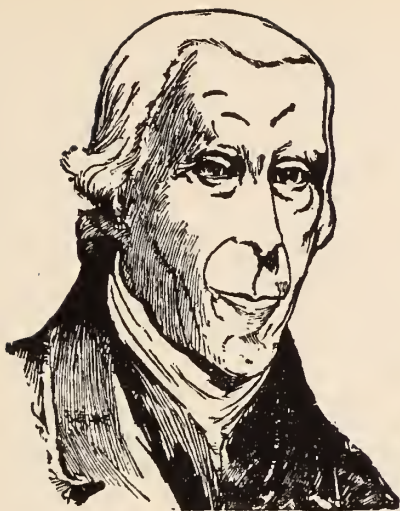


FIG. 1.



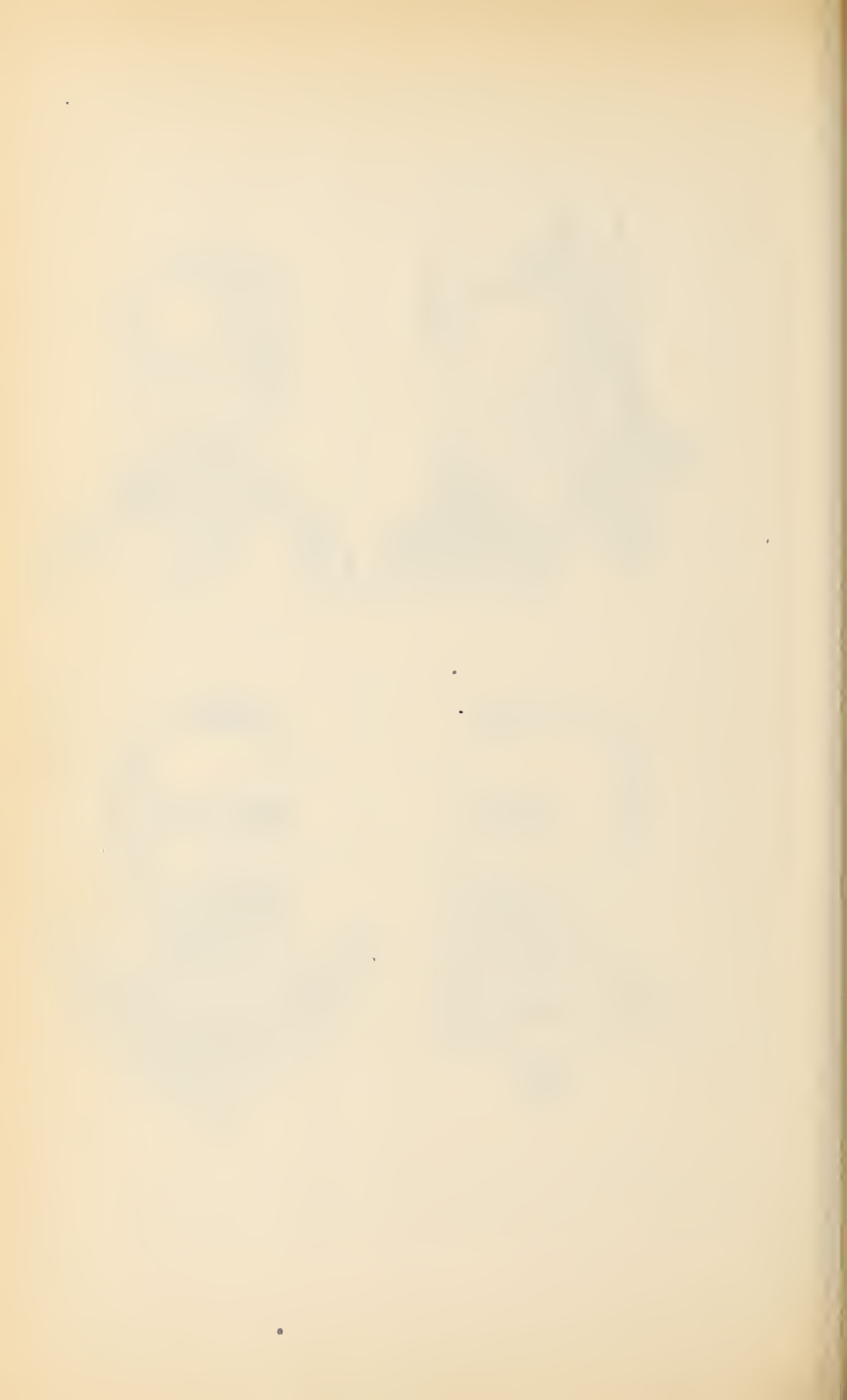
FIG. 2.



FIG. 3.



FIG. 4.



lost two of his incisor teeth is recognized by students of dentistry. That he is beginning to lose his wisdom teeth also, is the conclusion of the majority of scientists. That strain at school examinations produces deterioration of teeth is likewise certain. Were these tendencies alone to be considered, it might be said that, viewed from the standpoint of dentistry, the race is degenerating.

The changes which occur in the general outline of the head and jaws in a few generations are excellently illustrated in the following portraits of a noted family in this country. Four generations are here shown in the order in which they lived. The cuts are drawn from daguerreotypes and photographs and of course are useful only in giving the general outlines of the shapes of the heads. Unfortunately the hair upon the faces depicted in the last two illustrations forbids any comparison being made so far as the jaws are concerned. There, is however, such contrasts in the shapes of the heads that those familiar with craniology can readily trace the changes which would naturally take place in the shape of the jaws.

Fig. 1 represents a man born in Connecticut in 1861; died in 1892. This picture represents a dolichocephalic head with massive jaws, prominent lips, especially the upper. The nose is long and the eyes are set close together, the forehead very high and straight.

Quite a change is noticeable in the second generation depicted in Fig. 2. The face is not so long, the lateral diameter of the head is larger, the forehead more prominent and the eyes are a little farther apart. The nose is about the same length, and while there is a resemblance about the mouth and chin the distance from the front of the chin to the tip of the nose is not quite so long. The change seems to be the shortening of the chin.

Fig. 3 shows still further changes. The forehead is broader and less retreating than either. There is perceptibly less prognathism. There is less prominence in the supra-orbital region.

Fig. 4 shows a head just the opposite of Fig. 1. This is a brachycephalic head. The head is nearly round, fore-

head full, eyes set in the head to correspond with the width of the head, nose broad, upper lip short and lower jaw is evidently much shorter in a perpendicular line. These changes are due to a protruding forehead receding chin and delicate features.

These cuts show that in four generations shapes of heads have entirely changed. It is possible that reverse changes from brachycephalic to dolichocephalic might take place but I am of the opinion that the long headed race are gradually becoming extinct and the broad headed races taking their place. Anthropologists are familiar with the changes that take place in the jaws corresponding to the changes in the head.

Degeneracy cannot be, however, viewed from the standpoint of a single organ, but the combination of all, otherwise the dangerous error results of considering the short-lived savage as the type of health and vigor. That the race has elements of degeneracy in it, is undeniable. That it often fosters and creates such elements is notorious. The United States created among others the famous "Jukes" family. Of 709 known members, less than 10 per cent were self-supporting, good citizens. Fifty per cent of the females were lewd. Twenty-five per cent were skilled criminals. The remainder were paupers, vagabonds and defectives. This family sprang from and continued in the lower levels of society, where might naturally be expected the development of the criminal and pauper classes. Anything corresponding to it among the so-called middle and higher classes would seem remarkable. It would of course be impossible to find a family chiefly of paupers among the middle classes, since pauperism is incompatible with such a social rank. But if the pauper be defined as what he actually is, the being who wants ability or more particularly inclination to labor, but has a greed for the property of others, the term could be applied to all who live by their wits. Degeneracy permeates all classes of society and crops out in various ways.

It would be well to state what a degenerate is, since it has become such a popular term. According to Morel, who wrote fifty years ago, and his disciples, a degenerate is one

whose brain and nervous system are unstable from inherited or acquired taint in the parents, who has in consequence undergone imperfectly the embryological changes to a higher type in tissues or organs and therefore exhibits tendencies liable to extinguish the race as a type under the usual conditions of the struggle for existence.

When the bony system becomes involved there is either excessive or arrested development of tissue. Any deviation from the supposed normal is a deformity.

The ear is most often deformed; indeed, it is rarely ever in harmony in all its parts. Next in order come the jaws and teeth, the face, curvature of the spine, club-feet, and arrested development of the limbs are often seen and are true marks of degeneracy, as also are plural births and monstrosities.

An individual is not a degenerate who possesses only one deformity, but those persons who have three or more can safely be considered as such. Deformed ears, cleft palate, hare-lip and club-feet are observed at birth, but deformities of the face, jaws and teeth cannot be considered until after the twelfth year, or until the second teeth are well developed.

Of 3,000 insane about 75 per cent were found to have marked deformities. Of 100 cases of editors, authors, professional men and expert mechanics, 68 per cent were found defective. In 2,000 idiots, 65 per cent; of 514 inebriates, 74 per cent; of 1,000 school children over 12 years of age, 34 per cent; of 2,000 adults, 39 per cent were deformed. Of 128 men counted in a billiard hall, 82 per cent possessed marked signs of degeneracy.

These figures seem to foreshadow decided degeneracy of the race. That the elements of degeneracy are wide spread is undeniable. To claim, however, that man is degenerating is drawing an absolute conclusion and not the relative one science demands. The ancestors of the people examined should be compared since all physical evidences entitle the scientist to claim is, that they evince a tendency to mental, moral and physical defect not the defect itself. The degenerate man may be working upward toward health,

not downward to disappearance. The number of defective beings in the Jukes family does not, considering the environment prophesy as much evil as the comparatively large number of normal beings, augurs good. That degenerates are dangerous to society must be admitted; that it is constantly creating them is also undeniable. That society has enormous assimilative powers is equally true. It will not do to rely on these alone, since the pauperization of the Roman people, who cared for nothing but "bread and circuses," led to the replacement of Roman institutions by barbarism. The first duty society owes to itself is study of its degenerate foes. The first step has been taken in this by the discovery of the marks of degeneracy. Unless the lesson taught by these be heeded the race bears within itself the seeds of its own destruction.

THE COLORED INSANE.*

By J. W. BABCOCK, M. D., Columbia, S. C.

Physician and Superintendent, South Carolina Lunatic Asylum.

TO you, Mr. President, and to other members of this Conference, this has seemed a fitting time to consider the question of insanity in the negro. At your request this paper has been prepared; but, rather than present for your consideration my own opinions only upon this important subject, I have undertaken to compile as well the observations of others, also to present an historical sketch of the policy pursued by the several States in dealing with the colored insane.

The term "colored insane" is here applied to all persons of African descent, to full-blooded negroes as well as to half-breeds. The statement made by Witmer in writing upon this subject that "colored" is used by him because "it is probable that there are no full-blooded African negroes in the United States at this time" (1890) will be denied by any one familiar with the colored people of the Southern States. On the islands of the Carolina coast the negroes are an unmixed race. Of 192 negro men under my care on April 24 last, 78, or 40 per cent., were pronounced "full-blooded" Africans by intelligent men of their own race.

I. INSANITY IN THE NEGRO.

According to the testimony of travellers and natives, mental disease is almost unknown among the savage tribes of Africa. Among the slaves of the Southern states, also, insanity appears to have been conspicuously rare in the experience of individual observers. Since emancipation, however, brain diseases have become more common in the negro as compared with the whites, having increased,

* Read before the National Conference of Charities and Corrections at New Haven, Conn., May 30, 1895.

according to the census, from one-fifth as common in 1850 and 1860 to one-third as common in 1870 and to one-half as common in 1880 and 1890.

To sociologists this fact is scarcely of less interest than it is to physicians.

According to the figures of the Census Office the colored insane of the United States were in:—

1850.....	638,	giving a ratio of 175 per million inhabitants.
1860.....	766,	“ “ 169 “ “ “
1870.....	1,822,	“ “ 367 “ “ “
1880.....	6,157,	“ “ 912 “ “ “
1890.....	6,766,	“ “ 886 “ “ “

By the last two enumerations the proportion of colored insane in different parts of the country was as follows:—

	1880	1890
Northern States	1 in 545	1 in 542
District and Territories	1 in 680	1 in 376
Southern States	1 in 1,235	1 in 1,364

In Virginia it has been claimed the increase of insanity in the colored race has been for twenty-five years at the rate of 100 or more per cent. every ten years.

The apparently rapid increase of insanity in the negro after his emancipation began to be recognized by Southern asylum superintendents as early as 1867.

In 1848 Dr. John M. Galt, of the Williamsburg (Va.) Asylum, in writing upon the colored insane, observed that “the proportionate number of slaves who become deranged is less than that of free colored persons and less than that of the whites. From many of the causes affecting the other classes of our inhabitants they are somewhat exempt. For example, they are removed from much of the mental excitement to which the free population of the Union is necessarily exposed in the daily routine of life, not to mention the liability of the latter to the influence of the agitating novelties in religion, the intensity of political discussion, and other elements of the excessive mental action which is the result of our republican form of government. Again, they have not the anxious cares and anxieties relative to property, which tend to depress some of our free citizens. The future, which to some of our white population

may seem dark and gloomy, to them presents no cloud upon its horizon. Moreover, not only are they less exposed to causative influences of a moral character, but the mode of life which they lead tends to strengthen the constitution and enable it to resist physical agents calculated to induce insanity."

In his inquiry into the causes of the increase of insanity among negroes since emancipation, Dr. Powell, of the Georgia Asylum, concludes that "their remarkable mental and physical health, and their immunity from certain diseases, while in slavery, was entirely due to the healthful restraints that surrender them from childhood through life. They were taught from infancy obedience and self-control, and forced to obey all the laws of health, so that their environments all tended to health. The cause of insanity and other diseases with them now, from which they were exempt in slavery, is the removal of all healthy restraints that formerly surrounded them."

It is doubtful whether in the history of the world any race of men has lived in whom such a degree of inhibitory power has been developed as existed in the Southern slaves.

"The new and strange relation into which our negro population has been driven by the acquisition of freedom," says Dr. Atwood, of St. Louis, "the sudden demand upon sluggish and uncultivated brains for vigorous and effective action, while competing with the dominant and cultivated Caucasian in the struggle for existence; the melancholy that comes like a blight with the sense of failure, and the hopelessness of contention; the aspirations for social and political success and recognition, so frequently doomed to disappointment, have borne legitimate fruit in the generating of diseased brains and disordered minds, to a degree vastly disproportionate to the numerical relation of the races."

While placing, in the main, little reliance upon the alleged causes of insanity as given in the statistical tables of asylums, we may, however, arrive at some more tangible results by collating the results obtained by independent investigators. Thus, from the Petersburg (Va.) Hospital, we have the statistics as to *causation* of 3,052 cases of colored

insane in twenty-five years, and from South Carolina 1,142 in thirteen years. The largest percentages of assigned causes are as follows:—

	VIRGINIA.	SOUTH CAROLINA.
	Per cent.	Per cent.
Alcoholic dissipation	6.224	3.94
Heredity.....	2.62	14.8
Religious excitement	5.70	8.49
Blows on the head	2.29	2.18
Syphilis	.983	.7

Is this increase of insanity in the negro real or apparent?

For the first nine years after the opening, in 1865, of the Tennessee Hospital for Insane Negroes, an increase of insanity among them was observed. For the next eight years there was a diminution. It was conjectured that during the first decade mental disease was produced by the excitement and general agitation following new conditions of life.

It must also be remembered that all colored lunatics who had been cared for by their owners became, after emancipation, objects for county and State care. Hence we find in 1867 the demand for admission of colored patients especially attracting the attention of asylum superintendents.

In the South Carolina Asylum the admission of negro patients for the decade ending Nov. 1, 1894, numbered 1,531, the admissions for the first and last years being 151 and 149 respectively, while the annual average was 153. Of these the total first attacks were 1,024, of which 91 were for 1884, and 106 for 1894, the average being 102. Since all the insane for whom application is made are received into the South Carolina Asylum, these figures do not indicate for the last decade an increase of mental disease as compared with the increase in population.* This conclusion is borne out by the returns of the last census, not only for South Carolina, but also for the United States, since the ratio of insane per million of colored people for the whole country declined from 912 to 886, and remained stationary or declined in the South Atlantic or South Central Divisions, but increased slightly in the other sections.

* The colored population of South Carolina in 1880 was 604,332, and in 1890 688,934.

In considering this subject, we must also keep clearly in mind the fact that increase of population means an absolute, if not a relative, increase in the number of the insane; and, furthermore, we must make due allowance for the omissions and other errors of the earlier enumerations of this class.

No one to-day places too implicit confidence in statistics. The figures I have cited have only a relative value, and in this light only are they to be considered; but we cannot lose sight of the fact that on the basis of the census, as compared with insanity in whites, mental disease in the negro has arisen from one-fifth as common in 1850 to one-half as common in 1880 and 1890.

For the general public the most important fact in connection with the subject of insanity is the question of the support of this constant accumulation of lunatics. The ratio of insane per million of the total population may have fallen from 1,833 in 1880 to 1,700 in 1890, and of the colored insane in the same decade from 912 to 886. But the total number of insane rose in that period from 85,803 to 99,779, and of the colored insane from 6,156 to 6,766. All theories and other considerations aside, proper provision for this increasing number of degenerates most deeply concerns the tax-payer, the legislator, and even the asylum officer.

FORMS OF INSANITY.—Some years ago it was believed that the negro was exempt from certain forms of mental disease which are well defined in white races. For instance, Roberts, of North Carolina, in 1883 had never seen a case of general paralysis among his colored patients, nor Powell, of Georgia (1886), in a "full-blooded negro." Dipsomania and the opium habit had also not been observed. Further investigation has disclosed the existence of all these types of disease in the negro, although they are still comparatively rare.

Two interesting phases of insanity in colored races are the comparative rarity of melancholia and the prevalence of mania, which is twenty per cent. more common than it is in the whites. Consequently, we should expect to find, and do find, almost an absence of suicidal tendencies among

the colored insane. In commenting upon the prevalence of mania which he found among native Africans, Greenlees observes that, "if we consider the theories of those who maintain that, while mania represents a loss of the lower developed strata of the mental organism, melancholia indicates an absence of the higher and latest developed strata, then this prevalence of mania among natives of low developed brain functions goes far to prove this theory."

II. STATE PROVISION FOR COLORED INSANE.

Prior to 1861 African lunatics were received into few Southern asylums, partly because cases of the milder forms of mental diseases were cared for by their owners, but principally because in most States no provision was made for the admission of negroes as patients. Notable exceptions, however, were made in Virginia, Kentucky, South Carolina, Maryland and the District of Columbia.

In the New England, Middle and most of the Western States the number of colored lunatics has always been proportionately so small as not to assume the significance of a separate problem in the care of the insane. In those States insane persons of African descent are admitted to State hospitals and asylums upon the same conditions and are assigned to the same wards as white patients. But in private asylums North and West negroes are either not received at all or only under very rare and exceptional conditions. This distinction is due entirely to social considerations.

In the South where fourteen-fifteenths of the African race are now massed, and whither the tendency to further concentration appears evident, it is natural that the problem of the management of the colored insane should assume proportions and raise questions of public policy which in the East and West are of small moment and where perhaps they may be even not easy to understand.

The history of the policy of the different States in dealing with the colored insane can best be presented by extracts from the annual reports of asylum superintendents. By this method we can learn how year by year a difficult and

intricate problem has been dealt with almost independently by the several States, for it appears that the question has not received much comparative study from men whose positions of responsibility should have evoked special investigation of this subject.

VIRGINIA.—In the report of the Staunton Asylum for 1845, Dr. Stribling says: "Having long been impressed with the importance of suitable provisions being made for insane colored persons in our State, and having waited in vain for some one more competent to present their claims to the legislature, we ventured in our last annual report to allude to the object, and make a few suggestions designed to favor its accomplishment. Nothing, however, was done or even attempted. . . . The reflection which we have been enabled to bestow upon the subject convinces us that it would be mutually prejudicial to both whites and blacks, but especially to the former, were the two classes blended in one asylum or within the same enclosure. The principal reasons for this opinion are based upon a knowledge of the relation which most of the patients in our State institutions sustained to colored persons previous to their mental affliction connected with the consideration that the prejudices existing when in health have been aggravated, in all probability, by the morbid state of feeling which insanity mostly engenders."

On the 11th of May, 1846, there were in the Williamsburg Asylum 12 free colored females and 5 males; and in 1849 Dr. Galt, the distinguished superintendent of that asylum, said in his report: "The colored insane in Virginia, may be divided into two classes: first, those who are free; and, second, slaves. Patients of the first class have been received into the asylum from the date of its opening. The directors have always construed the thirteenth section of the act of March 6, 1841, and the clauses corresponding with it in similar previous acts of a general nature, to apply to free persons of color, so that they have been all along placed upon the same footing as to the right of admission which was possessed by white persons. During the legislative session of 1845-46 the board petitioned this body to allow

them to receive insane slaves as patients. And the legislature, with the wise philanthropy which has ever marked their supervision of the suffering insane, granted this request in the act of Jan. 16, 1846. Since that period very few colored applicants have been refused for the want of room; and those in charge of this asylum have had the privilege of ministering to the wants of all classes of persons laboring under the great calamity of an insane mind, irrespective of color or social position."

The Freedman's Bureau maintained a General Hospital at Howard's Grove, near Richmond, from 1865 till 1869, during which time part of the colored insane was received there for treatment. During this period 25 colored patients were under care at the Williamsburg Asylum. When the Bureau withdrew and the hospital patients were dispersed, General Canby, then military governor of Virginia, re-established the asylum exclusively for the colored insane, Dec. 17, 1869; and the legislature incorporated it as a permanent State institution in June, 1870.

Governor Walker, at the centennial ceremonies of the Eastern Lunatic Asylum at Williamsburg, in 1873, says that "Virginia, in her deep poverty, had established the first asylum for the poor colored man ever organized."

In 1876, with 243 patients under his care, Dr. Barksdale, the superintendent, urged the enlargement of the asylum, so that all the colored insane in the State, many of whom were then in jails, might be received.

In 1882, \$100,000 was appropriated for this purpose by the legislature, and in 1885, 373 patients were transferred to the new asylum which had been built near Petersburg.

In 1887, having 436 patients under his care, Dr. Barksdale reported that 100 colored people were unprovided for, the large majority being in jails. The legislature responded to this by appropriating \$22,500 for a new building, which was completed in 1888; but in 1889 the capacity of 600 beds of the institution was nearly full, and 64 colored patients were being cared for at Pinel Hospital, a private asylum near Richmond. The legislature again responded by appropriating \$20,000 for a new building, but before it was

completed in 1891 there were 80 patients at Pinel Hospital, and 15 in jails awaiting admission. Pinel Hospital was closed in 1891 and large accessions were made to the Central Hospital. Again the legislature appropriated \$20,000 and the daily average number of patients under treatment in 1892 was 700, and the superintendent says: "From all the information I can get there are at least 125 colored insane people within the State who have been adjudged insane, and the authorities are continually clamoring for their respective unfortunates." In 1894 further provision had been made; and 939 colored insane were under treatment at Petersburg, the daily average being 802.

KENTUCKY.—On May 1, 1824, the asylum at Lexington was opened. It was the fifth institution for the insane completed in the United States, and the first west of the Alleghanies. Into that asylum the first patient received was a colored woman. To what extent colored persons were subsequently admitted into the Kentucky Asylum I have not been able to learn, but in his report for 1857, Dr. Chipley, the superintendent of the Lexington Asylum, says: "As heretofore, many humane masters have sought to place their servants in this institution for treatment, and it has been a painful necessity that compelled us to refuse their admission, especially when the case has presented flattering prospects of yielding to suitable treatment, But no provision has been made for their accomodation."

In 1867 Dr. Chipley says: "The new building, for which the legislature provided at its last session, is going up in the most satisfactory manner, and I now feel sure that both it and the building for negro lunatics will be completed in strict accordance with the act appropriating money for that purpose."

In 1868 he continues: "Provision has been made here for negro lunatics, to the extent of 35 of each sex."

Dr. Forbes, of the Central Lunatic Hospital, reports in 1875 that "the legislature last winter appropriated \$33,000 for the purpose of erecting and providing buildings, rooms and accommodations here for colored lunatics, . . . but it was

specially provided that 'the colored and white lunatics shall not be kept in the same building.' "

In the following year Dr. Forbes asks: "What more permanent disposition is to be made of the colored insane? The departments allotted to their care both at Lexington and here are full. There are now about 150 of this population provided with accommodations in the State. The increase will have to be considered—whether it will be better to go on with extensions there or here, or both, or to isolate them from the whites entirely, inasmuch as it is important and necessary to keep them wholly separate."

In 1883 Dr. Gale, the superintendent of the Central Hospital, announces that the buildings now occupied by the colored patients are overcrowded and wholly unfit for occupation, and should be dispensed with as soon as proper provision can be made for the inmates, about 100 in number.

In the report of the Eastern Hospital for 1885 it is stated that "no provisions have been made for the colored insane, which, if not done, will virtually close our doors for their admission in this asylum. Many of the colored insane are now confined in the county jails of the State, and your attention is specially called to this sad condition of affairs. The capacity of the wards occupied by this class has remained the same for the last fifteen or twenty years."

In 1885, at the Anchorage Asylum, 68 colored patients were under treatment in newly renovated departments; and in the following year the superintendent of that asylum advocated the erection of a separate institution for the 200 patients then under treatment.

In the Eastern Hospital, at Lexington, in 1887, 39 colored men and 40 colored women were under treatment, and in 1894 at the Central Hospital 219 colored patients were being cared for.

SOUTH CAROLINA.—In 1848, twenty years after the opening of the Lunatic Asylum of South Carolina, the General Assembly of that State passed an act admitting negro lunatics, idiots and epileptics upon the conditions previously established for white patients. In the decade following the passage of that law 30 negro patients were admitted to the

asylum, but more than five were never under treatment at one time. These patients were kept apart from the whites, and the sexes were separated in small, one-story, brick structures, which Dr. Parker, the superintendent, described as affording inadequate provision for comfort and care.

Subsequent to 1848 colored patients were annually received into the asylum. In 1869, 29 were admitted. The suddenly increased numbers were housed in wooden pavilions, which have from time to time been enlarged and extended to meet the demands for additional accommodations.

In commenting upon this arrangement, Dr. Parker says in his report for 1869: "These buildings, although comfortable, are of wood, and in other respects are ill adapted to the purposes to which they are put. My experience leads to the conclusion that the welfare and proper treatment of the insane of both races require that they be kept entirely separate and apart; and with this conviction, even if the present buildings were of greater capacity, I would still recommend that another and distinct house of brick, properly planned and arranged, be erected as soon as practicable for their special accommodation."

In 1878 Dr. Ensor expressed the opinion that "the white and colored patients ought not to be domiciled in the same buildings. The natural antagonism of the races is opposed to the course; and the sooner the State makes provision for their separate maintenance, the better it be for both races. They both may be provided for in the same institution and under one management, but in different buildings."

In the report for 1889, Dr. Griffin writes that "the negro men are quartered in wooden buildings, erected out of the savings from the appropriations for maintenance from time to time as became necessary; that the colored women occupied half of the old asylum and two (wooden) pavilions annexed; that these wooden buildings incur great risk from fire, and that the two races were in juxtaposition mutually distasteful."

With rare exceptions, all patients for whose admission application has been made have been received into the asylum; and the law forbids the keeping of any insane

persons in jails beyond temporary detention, so that up to the present time South Carolina has admitted to the asylum all her insane. There were 182 colored men and 156 colored women under treatment Oct. 31, 1894.

Within a few months a contract has been made for supplying during the summer one and a half million of brick for erecting a building for colored male patients, so that it may reasonably be expected that this work, already too long delayed, may rapidly be pushed to completion.

MARYLAND.—There were 10 colored patients under treatment in the Maryland Asylum in 1845. In 1850 there were 12 colored patients. In 1852, 6 colored men and 4 women remained under treatment. All of these were probably free persons of color. In the report of the Maryland Hospital for 1877 it is stated that "there is no provision whatever in the State for the separate care and treatment of the colored insane, other than has been made in this hospital."

In 1879, Dr. Richard Gundry announces that "two grand juries of Baltimore have in their reports reflected upon the indiscriminate mixing of white and colored patients in the same wards of the institution." Again, in 1890, Dr. Gundry calls especial attention to this subject: "We have 62 colored patients, 34 males and 28 females, for whom it were better that provision should be made elsewhere—better for their own sakes and better for the other patients, to some of whom they are a source of irritation. If the State would provide better accommodations for all the colored insane of Maryland at some convenient place, with adequate means of classification, their condition would be greatly improved; and more recoveries might be looked for among them." For a number of years colored lunatics of Baltimore County have been received into the Bay View Asylum. Since 1888 the Lunacy Commission of Maryland has been advocating the erection of an asylum for colored insane; and in 1895 appropriation was made for building a new asylum; but no special provision has yet been made for the colored insane as far as I can learn.

upon this subject that we now almost despair of accomplishing anything in the future."

In spite of Dr. Langdon's efforts, no provision for insane negroes was made by law in Ohio till April 5, 1866, after which the directors of the Longview Asylum expended \$12,000 for the purchase of a house on land adjoining the asylum and \$8,000 in fitting it up. By Sept. 1, 1866, the colored lunatics of the county were under treatment, and ample accommodations provided for all the colored insane for many years. The directors took pleasure in saying, "when all is completed, they will have a pleasant and quiet home for the colored insane in this county. This being the first asylum for the colored insane in the United States, we feel proud of our county and State."

In the same report Dr. Langdon says: "It is a source of great gratification to me that provision for the colored insane has been made. . . . It may be that I have appeared to many to place too great a stress on the necessity of such provision. These cases, however, came frequently under my observation; and I could not help feeling that justice and humanity called for some better treatment of this class of unfortunates than incarceration in the common jail. . . . Immediately after the passage of the law providing for the colored insane, applications were made for their reception into the building with the whites. This we could not do, owing to the strong prejudice which exists in the minds of most whites, and in none more strongly than the inmates of the asylum. . . . It was, therefore, deemed necessary, in order to carry out the intention of the law, to purchase another building; and one within a reasonable distance, formerly occupied as a water-cure establishment, was accordingly, by permission of the board, purchased by me, and fitted up for the reception of the colored insane. . . . All of this class belonging to the county have been freely received and kindly and carefully treated."

Doctor Langdon's reports in 1868 that "the colored department has done very well during the past year, the results demonstrating plainly the wisdom and humanity of establishing it.

only their rights of the present, but whatever is possible of requital for the past, I am not the less solicitous to maintain in an operative form all the benefits of those charities to the afflicted among the whites. If a mixture of races be made the condition of participation of our public charities, no matter how you regard the wisdom of the objection, that condition will act among the whites to a very great extent as a virtual exclusion."

"That was well said," adds Dr. Compton, "and the 'arrangement' was made to avoid the 'mixture of races.' We have had no trouble from this cause. The two races are not mixed, but they are both under the same control. We have had no race-jealousies nor race conflicts, no race-clashes of sentiment nor race-gougings of eyes, either amongst the patients or employees. The wards are as separate and distinct as the houses on a street, and neither class ever trespasses upon the precincts of the other. In the field and in the garden the patients of both sexes work side by side, harmoniously together under the same supervision, without jar and without discord. We have no wounding of sensibilities; and, with certain well-defined lines of separation which neither class has ever been disposed to cross, it may be truly said that we 'dwell together in unity.'"

In 1890 Mississippi built at Jackson an annex especially for the colored insane; and in September, 1893, 302 colored patients were under treatment as compared with 378 whites. I understand that no colored insane are now received at the Meridian Asylum.

THE GOVERNMENT HOSPITAL AT WASHINGTON.—In the first report of the Government Hospital for the Insane in 1856, Dr. Nichols, the superintendent, says: "The erection and occupancy of a lodge for colored insane, possessing most of the provisions of an independent hospital, inaugurate, we believe, the first and only special provision for the suitable care of the African when afflicted with insanity which has yet been made in any part of the world, and is particularly becoming to the government of a country embracing a larger

population of blacks than is to be found in any other civilized State."

In 1860 the same excellent superintendent expresses in his annual report "the confident expectation that the lodge for colored females will soon be completed, and result in the very desirable separation in different buildings of colored men and women who now occupy different stories of the same building."

Dr. Godding, the worthy successor of Dr. Nichols, reviews the subject in his report for 1887, saying: "Two detached buildings for the colored insane, male and female respectively, formed a part of the original plan of the hospital. These at first accommodated 20 of each sex, a provision mostly in single rooms. The extension of these buildings recently provided for, together with those previously made, will increase the capacity of each lodge to 100 beds, for the most part in associate dormitories. The African is gregarious in his habits, and the social character of this arrangement suits him. In some cases, however, the type of insanity renders segregation necessary. A race distinct from the whites, with peculiarities and ways of their own, they are most at home in quarters by themselves, and happier in their associations than scattered through the buildings, as necessity has compelled in the more crowded days."

In 1891 Dr. Godding, in commenting upon special features in the management of the Government Hospital, cites: "Another instance where the segregate plan of provision has given especial satisfaction is seen in the female department at the Lodge, a distinct building for the colored women, where, one-tenth of the most violent having been arranged for elsewhere, the remaining nine-tenths are, with hardly an exception, kept busy at some useful occupation. It is one of the pleasantest quarters to visit in the whole establishment. The faces are happy, work is fashionable, and a person doing nothing is decidedly off color."

TENNESSEE.—Several negro patients were provided for in the Tennessee Hospital for the Insane prior to 1865, when the legislature appropriated \$25,000 for building an asylum for colored insane; and after a special act of May, 1866, all

are now confined in the county jails, awaiting admission to the hospital, and must remain there until further provision is made for their accommodation. . . . Until the State does make such provision, numbers of this class must continue to eke out a miserable existence in the county jails or be allowed to roam about the country, at the peril of the community and great damage to themselves."

In 1888, the legislature having appropriated \$20,000 for the erection of another large building for the exclusive use of this class, the building was soon completed; and many who had been confined in county jails and poorhouses were received.

In 1890 Doctor Bryce, and in 1892 Doctor Bondurant, represent their wards as overcrowded, and ask for relief; but this applied to white as well as colored patients.

In 1894 Doctor Searcy reports the inauguration of an ideal arrangement for caring for his colored patients. Cottages had been begun two and a half miles from the hospital, in which convalescing and chronic negro patients could follow lighter occupations of farm life. Recent or acute cases are kept in suitable buildings at the hospital. This system, as it is now developing at Tuscaloosa, offers, it seems to me, after personal inspection, the best solution of caring for the colored insane at the South, and is worthy of study and adoption by other states.

TEXAS.—In 1866 Doctor Graham, the superintendent of the Austin Asylum, recommended that provision be made for the colored insane; and Governor Throckmorton urged the legislature to make the necessary appropriations, which was done. After 1867 colored patients were regularly admitted, though references to the subject in reports are few. In 1880, 36 colored patients remained under treatment. In 1884 there were 54.

In 1886 Superintendent Denton says: "I have heretofore, in two of my annual reports, called attention to the unavoidable mixing of the white and black population in the wards of this asylum; and I again call attention to a practice which, to say the least, is distasteful to many of the friends of the inmates, as well as to some of the patients

MISSISSIPPI.—Dr. W. M. Compton, superintendent, in a "Retrospect" of the Jackson Asylum, says in his annual report for 1877, "it will be remembered that this asylum was not opened until 1855. To show that the managers were not oblivious nor indifferent to the wants of the colored people, then slaves, it is only necessary to quote from the report of the board of trustees to the legislature in 1856. They said: 'There is no provision under existing laws for the reception of slaves nor free persons of color into the asylum. This, had it been presented to the attention of the legislature, would doubtless have been provided for. . . . The trustees believe that there should be a special department for this class. The masters of slaves received as patients ought, unquestionably, to support them while in the institution. And, in case of free persons of color who have property, they should of course support themselves; but, when they are unable to do so, the charge, as in other cases, should fall on the counties in which they reside.' "

(Signed by five trustees.)

"After the war was over," continues Dr. Compton, "although the relationship between the races in this State had been changed, the demand for the care and treatment of the colored insane was still more imperative. In 1870, I pressed the matter upon the attention of the legislature; and, when the new wings were opened, proper wards were assigned to the colored people, and they have been occupying them ever since. At first, and before the experiment was tried, it was apprehended that a feeling of caste would operate against the success of an institution in which the afflicted of both races were under the same control. Governor Alcorn had an eye to this when he wrote his message to the legislature in 1870, saying: 'In the case of the insane I have called attention to the necessity of an arrangement of the asylum for the separation of the white lunatic from the lunatic of color. Principles are general, not special, and can never be made to apply in all places and under all circumstances. While anxious for the measures of reform which I have already pointed out in the charities of the State, with the view of giving the colored people not

Doctor Webb, who held Doctor Langdon's place in 1872, in continuing the history of this interesting experiment, says: "There are at the colored asylums 29 patients, only 6 belong to Hamilton County, the remaining 23 to the State. At the time this colored asylum was founded it was, no doubt, the best disposition that could be made of the colored insane; but this necessity does not exist at this time, and its longer continuance is a drain on the funds of Longview. I respectfully suggest to your body that immediate steps be taken to do away with it as a colored asylum. There can be no objection to receiving the colored insane into the State institutions of their respective districts. Hamilton County can care for hers. In all the institutions I have visited there is no difference made on account of color. I made special inquiry on this subject, and failed to find where any difficulty had occurred on account of the mingling of the races. Surely, if our city hospitals can admit both races, our insane asylums can do the same." A new board of directors having come into office in 1875, they give it as their opinion that "the house occupied as a colored asylum (never suitable for this purpose has, notwithstanding constant repairing, become so dilapidated as to be really unfit for occupation as an insane asylum. In view of these facts the board of directors are taking the necessary steps to have suitable buildings erected, so that the increasing number of patients can be properly cared for." In the report for 1877 the superintendent, Doctor Bunker, says, "The colored, or lower house, is in a dilapidated condition, and, if not disposed of or abandoned soon, will require plastering and flooring throughout to make it at all habitable." Subsequently, at Longview, the colored patients were assigned to the same wards with the whites, and that system has continued.

GEORGIA.—Accommodations were first provided for the colored insane of Georgia, in the Milledgeville Asylum, in 1867. They have always occupied departments separate from the whites.

In 1870 Doctor Green, the asylum superintendent, says that "a separate institution for the colored patients is mani-

festly desired by the colored citizens generally. . . . They are almost or wholly unable to provide at home for one of their relations when insane, or to seek an asylum for them elsewhere. And the buildings provided for them here at present will, in all probability, not furnish the necessary accommodations for one-half of the colored lunatics, idiots, and epileptics now in the State, all of which classes are under the law entitled to claim admission.¹

New buildings have been recently erected at Milledgeville, increasing the accommodations for colored patients; and these buildings are almost ready for occupation. In Georgia there were in 1894, 539 colored insane persons under treatment.

ALABAMA.—Of the 77 patients received in 1867 into the Alabama Insane Hospital, which had been opened in 1860, 10 were negroes. Doctor Bryce, the superintendent, in commenting upon the fact, says: "Under the present organization this class [the negroes], as poll-tax payers, contribute as much as any other toward the support of the institution, and are therefore entitled to its benefits. I observe that the proper provision for this class of the insane is everywhere receiving a due consideration. So far as I am informed, a classification distinct from the whites has been made. This is unquestionably proper, and indeed necessary here, if good results are expected; and accordingly a portion of the hospital has been assigned to them, and will be held exclusively for their use."

The same authority in 1872 states that the wards for colored insane are now crowded beyond their healthful capacity, and he recommends the erection of a separate building for their accommodation.

In 1880 Doctor Bryce reports that the lodge for colored women had been completed, and is even superior to the lodge for colored men. In 1884 these lodges are described as well-designed, substantial buildings, which accommodate each between forty and fifty patients.

"For several years past these detached wards for colored people have been crowded, and applicants have been received only as vacancies occur. Numbers of colored insane

colored patients for whom application was made by the Freedman's Bureau or otherwise were received.

In 1867 Dr. Jones in his report asks for \$7,000 to complete the asylum for colored insane, and confidently concludes that "Tennesseans, having been the first people in the South to provide thus kindly and amply for a portion of their former servants, I imagine will not stop short of making the provision thorough."

In 1885 the trustees report that the colored insane are the recipients of every attention and comfort necessary to their afflicted condition.

In 1893 Dr. Callender says: "The annex to this hospital built for the accommodation of the colored insane has been full, and at times crowded beyond its capacity. There is urgent need for larger accommodations for the colored insane of the State whose number is increasing each year."

OHIO.—Dr. Langdon, superintendent of the Longview Asylum, in his annual report for 1860 says in effect: There is no legal provision for colored lunatics in Ohio. Being tax-payers, the colored people should have, when insane, the benefits of asylum treatment. At present colored lunatics are confined in jail with thieves and vagrants. Local authorities are helpless to relieve them. Dr. Langdon, therefore, urges upon the trustees the justice and propriety of erecting a building in connection with the Longview Asylum for the exclusive accommodation of colored lunatics. Five insane persons of color were then confined in the jails of Hamilton County. The directors of Longview say, Nov. 1, 1863: "Changes could be made at small expense of buildings now on the [adjoining poor-] farm, as would enable us to construct an asylum for colored insane, as an appendage to Longview."

In the same report Dr. Langdon continues: "Many of them [the colored population] pay heavy taxes, but their insane are compelled to herd with rogues and thieves and vagabonds in our county jails. This is an outrage upon justice, humanity and common decency; but so little attention has heretofore been paid to our oft-repeated suggestions

themselves." In 1888 the board of managers appealed to the legislature for better accommodations for colored female patients, who were kept in the basement of the building, without any of the comforts or conveniences of other parts of the building. The colored male patients were treated in all respects like the white male patients.

Colored patients have been received at the Terrell Asylum; but no particulars about their number, care, and accommodation could be obtained from accessible reports.

WEST VIRGINIA.—In 1867, in the Fourth Annual Report of the West Virginia Hospital for the Insane, Dr. Hills, the superintendent, says: "Several applications have been received for the admission of colored insane persons of both sexes. These have been necessarily refused admission, as we have no special arrangements for that class. Their admission into the wards with whites is very properly refused in all the hospitals of this country."

In 1876 Doctor Camden reports that the colored hospital is almost completed, and that soon the colored insane will be placed in a first-class hospital, equal in every respect to that occupied by the white insane.

In 1887 the board of directors state that the colored hospital is full, and patients of this class are refused for want of room.

In September, 1893, Dr. Crumbacker, the superintendent, reported that "nothing has been done toward the erection of a building for colored patients. The department now assigned them is overcrowded, and is unadapted to the requirements of the insane. There are now on file application for the admission of ten cases at present confined in jails."

In October, 1894, the directors of the West Virginia Hospital for the Insane inform Governor MacCorkle in their report of the inadequacy of the appropriation for colored insane for either a new hospital or an annex to the existing one, and declare that it would be a waste of money to begin with so small a sum. They ask for \$15,000 for a building to relieve overcrowding as well as receive patients in jails.

MISSOURI.—In 1871, at the St. Louis County Insane Asylum, ten colored patients were treated during the year, presumably in the wards with white patients. In 1875, Superintendent Howard says: "Separate accommodations should be provided for epileptics as well as colored patients." In 1887 Dr. LeGrand Atwood in his report, after discussing very intelligently and succinctly "Insanity in Negroes," concludes that, "as in the world social equality between the races is recognized as impossible, unattainable, and undesirable, so in an asylum a distinction should be made."

In 1892 Dr. Mueller had succeeded Dr. Atwood, and he reports that "the colored patients of all classes have so far been occupying the same apartments with the whites, which arrangement has many disadvantages and is not conducive to the comfort, nor is it likely to promote the welfare of either race." In 1893 Dr. Mueller continues to ask for relief in this direction, and recommends that a frame building on the asylum grounds known as the Cottage be turned over to the colored female patients.

No particulars were attainable from the reports of the State asylums of Missouri.

NORTH CAROLINA.—In March, 1875, the General Assembly of North Carolina appropriated \$10,000 to provide a branch asylum for colored insane, at Wilmington, to be subjected to the same superintendence, rules and regulations as in the institution for whites at Raleigh, where a small number of negroes had been under care since emancipation.

The act also provided that the expenditures for each patient should not exceed \$200 per annum. As the directors empowered to carry out the purposes of this act were unable to effect a lease of the Marine Hospital building in Wilmington, the first steps toward establishing a separate hospital for the colored insane of North Carolina were temporarily obstructed.

In 1878 an appropriation was made to build for the colored insane a separate asylum at Goldsboro. The building having been completed, it was occupied in 1880, and has since been successfully maintained as a separate and

distinct hospital in the centre of the colored population of North Carolina.

In his report for 1890-92, Dr. P. L. Murphy, of the Morgantown Hospital, says: "Of the 1,732 insane reported by the United States Census for 1890, 1,322 are white and 410 colored. In round numbers the capacity of this hospital is 550; the Raleigh Asylum, 300; the Eastern Hospital (for colored people) at Goldsboro, 300—making 1,150 insane provided for and 582 not in any institutions. In this district we have 281 white insane persons not in the hospital. In the Eastern district there are 191, and there are 110 colored people throughout the State. It is seen by these figures that all the institutions need enlarging, this one most of all, and the one at Goldsboro the least. North Carolina has provided better for the negro insane than for the white."

ARKANSAS.—In the first report of the Arkansas Lunatic Asylum for 1883, Dr. Forbes, the superintendent, in discussing the classification of patients, expresses the opinion that "there is an incompatibility in the races that demands emphatically and imperatively their separation and segregation." A year later Dr. Forbes reiterates his opinion, and remarks that "it [the separation of the races] is not a one-sided question, nor yet entirely a matter of taste. It does not depend more upon the habits of thought of such and such a one, from force of custom, than upon the character and training of the population to be affected by the movement. What might seem unnecessary or inexpedient in New York might be deemed most desirable and proper in Arkansas, as it is decided to be in Washington City. Certainly, the legal status of the colored population as regards the different localities may be that of perfect equality with the whites; while the social status, which is of far more importance as to the influence of association in a hospital for the insane, may be widely different."

"The opinion obtains here," Dr. Forbes continues, "more generally that the races retain so much incompatibility, as they probably will for this and the next and may be for many generations, that a certain degree of friction, from a want of affinity, will undoubtedly prevail where they are

congregated under the same regime. Under this view of the question it is unequivocally and earnestly recommended that steps be taken and means provided for their separation under the same administration. In this expression no discrimination is intended. It is only meant that each should be assigned to circumstances and surroundings that would be more agreeable and congenial to both, and therefore much more likely to conduce to desirable results in the treatment of their special maladies."

LOUISIANA.—In the asylum at Jackson the colored insane numbered 199 in 1882 and 347 in 1884, as shown by the reports. The superintendent, Dr. Perkins, says in 1890: "Our buildings for the care of colored patients are far inadequate to the demand. . . . Each room must accommodate five patients. This is a state of affairs which is in open conflict with all laws of health, comfort, and security, and should not be allowed to exist." In 1892 there were admitted 69 colored men and 57 colored women.

DELAWARE.—In a recent letter, Dr. Hancker, of the Delaware State Hospital, expresses his views as follows:—

"Owing to limited accommodations, we are compelled to associate upon the same wards both white and colored patients. This summer we will add detached buildings, and then I shall isolate the two races. I think it is detrimental to all concerned to compel the white patients to affiliate with the colored race."

FLORIDA.—From this State I have not been able to get reports or other information.

In the preparation of this paper I have, so far as possible, made my citations from the reports of men actively engaged in the practical administration of State charities. Obviously, these opinions have not been prepared for the purpose for which they are now used. All these reports indicate the most earnest and strenuous efforts on the part of asylum officers to obtain from legislatures the means of carrying out the purposes of great public institutions irrespective of race, color or condition of servitude.

The opinion seems largely to prevail among these authorities that the separation of white and colored patients

in lunatic asylums—in the Southern States, at least—is to the advantage of both races. In Virginia and North Carolina the geographical distribution of the negroes near the Atlantic seaboard has clearly indicated the need of separate and independent asylums for their insane near their centre of population. Although similar plans have been proposed in several other States, they have not been carried into effect for economical reasons mainly, but also because the negroes are more uniformly distributed through the other States.

Such is the history of this vital problem, as I find it recorded. In many places the record is most honorable, in others it is not creditable. Even in small and wealthy communities it requires a long period to educate public opinion to make proper provision for the insane. In this particular phase of the question to secure legislative co-operation has not always been an easy task; but, whatever of disappointment the past may have buried with it, the present and future are more encouraging and hopeful.

Mr. James Bryce, in his philosophical study of our "American Commonwealth," devotes to the "Present and Future of the Negro" a chapter, in which he concludes: "And, as the present differences between the African and European are the product of thousands of years, during which one race was advancing in the temperate and the other remaining stationary in the torrid zone, so centuries may pass before their relations as neighbors and fellow-citizens may be duly adjusted. . . . Revolutions of sentiment are no doubt conceivable, but they are more rare than revolutions in politics.

ABNORMAL BRAIN CONVOLUTIONS.

ADDRESS OF W. JULIUS MICKLE, M. D., F. R. C. P. Lond.,

President of the Section of Psychology, British Medical Association,
London, July 31st, 1895.

THE THEME.

I SPEAK of a few points in brain architecture, as manifest in the conformation and relations of folds and fissures of the brain cortex; and they are taken in reference to mental states, and particularly to the stigmata of hereditary mental degeneracy.

Though long pursued, my studies on this subject have been irregular and intermittent, partly because, at necropsies, attention was more potently occupied with the pathological and histological conditions of the brain and of the whole frame; and partly because other work pressed, and the limitations of time were rigid.

The accepted standards of gyral conformation having been meditated on at first, my subsequent studies on the subject were largely independent of the results of other observers; and thus the mind was purposely kept free from prejudice and preconception. For this abstention there were two reasons: First, one's dissatisfaction with some details of the then-accepted standards of convolutional form (to this subject I will recur); and, secondly, and later on, the appearance of a certain doctrine on the brain in relation to criminal anthropology, involving a special ascription of particular deviations from type as being distinctive of criminals; a doctrine which, at the time appeared to be incorrect as gauged by what I had seen in brains of the insane; a doctrine which has been partially or fully abandoned, since then, by those or most of those, who held it in that sense, or were inclined to do so.

II.—ANALYSIS OF NECROPSIES.

The general impressions received in the course of my investigation into convolitional brain architecture having been, in some respects, corroborated, in others modified, by a recent minute analysis of the results of many necropsies—some of them made far back in time—I will touch lightly, and in a brief and summary way, on one or two out of the many points on which this investigation has been instructive to myself, has been a gathering in of new knowledge, a modification of old.

III.—UNSATISFACTORY STANDARDS OF NORMAL BRAIN FORM.

We may take it for granted, and need not tarry to prove, that a different normal standard of brain form obtains in different stages of individual life, in different races of mankind, and, as a logical inference, must obtain also in different ages of the world and epochs of time; for what practically concerns us at the moment is the normal set of standards for modern British brains. The standards of the normal, hitherto chiefly in use and with which I began, were unsatisfactory, defective, incomplete, insufficient in range and even misleading. For their unsatisfactoriness there are several reasons. One is that some of them have been diagrammatic or schematic, thus unduly accentuating some features and minimising or omitting others. Another is that the brains from which certain figures and descriptions are drawn have been taken from dissecting-room subjects or from patients—most of them “incapables” of various kinds, dying in rate-supported or State-supported institutions—of whose life-history little or nothing is known in many instances; who often are failures in life—waifs and strays—broken fragments of the wreckage of civilization, the indication of degeneracy and breakdown. And such failures, waifs and wreckage are they very often—most often, indeed—because of their mental defect or perverted aberrant type of mind, which not infrequently has, as its accompaniment, sometimes pathological brain change, but sometimes also, or solely, has an abnormal brain develop-

ment and aberrant gyral conformation. Indeed, knew we their ancestral and life-history fully we would search such subjects for some of the most interesting forms of convolutional deviation from type. And still more would this be the case if, especially in the past and in some countries, dissecting-room subjects have been largely recruited from the criminals dying in prisons and the mentally decayed and defective dying in asylums. Therefore it is not surprising to find that sometimes the brains taken from the sources previously referred to, and published as typical, are what I do not hesitate to declare and describe as being brains of deranged or defective development, and utterly misleading if taken as normal. If the blind lead the blind they shall both fall into the ditch; and the ditch to which I refer is not an ancient and musty moat; it is well filled with modern mud. Let us see to it that we be not swamped therein, and therefore at an early date I had to modify in details what I had learned from the standards in use as representations of normal conformation of brain.

IV.—THEIR FULL SIGNIFICANCE TO BE ASSIGNED TO OTHER COEXISTING CONDITIONS.

At the threshold, we are met by the question how far we may rightly attribute any significance to these deviations of brain architecture in elucidation of the subject of mental defect and disorder. And, if we decide that they do possess a meaning in this relation, we next encounter the inquiry what precisely their significance is. In reference to this there are many fallacies into which we may wander, many pitfalls into which we may stray. To dwell even lightly upon these would occupy the whole of the time available for this address. Therefore, one must be content with bare mention of some of the most important of them, and thus at least take the precaution of guarding against misconception as to the purport, scope and implications of what will presently be stated.

To begin with, there is a number of conditions to which due weight must be given and their full importance and significance assigned. Such, for example, are: The patho-

logical brain changes found, both macroscopic and microscopic; the diseases of parts and organs other than the brain; disorders of blood and lymph circulation, with all their possible local and general states and effects; alteration of the blood constitution in itself; addition to the blood of morbid deleterious materials in, of, or derived from food, drink, drugs and pathogenic microbes; either transitory or diathetic autotoxic states, of abundant multiplicity of form and origin; practical starvation of brain or, again, its perverted nutrition, however brought about; the strain and stress of life, social, affective, occupational; the physiological evolutionary and involutional crises and changes of the organism. There are also such considerations as the relative size of the brain to the whole body or to standard weight of race and age; the relative proportion of grey and white in the brain; the richness of the grey, its depth, actual as well as relative, its natural minute structure, in a word, the more important part of the finer architecture of the brain; and finally, the outcomes, other than those mentioned in this address, of a comparative evolutionary elaboration, or evolutionary simplicity, of a brain, as the case may be.

Giving due place to all the considerations just mentioned, I conclude that there still remains over a body of evidence as to the existence of particular conditions and details of brain architecture which are indications and marks of low type of brain and mental organization; of defective and deviating types of brain development, correspondent to defective aberrant types of mental action and of outward conduct.

Within a certain definite range, I find an agreement between brain conformation and clinical psychiatry. I refer to my observations on the brains examined in an institution for the insane. Of these observations a large number were recently subjected to detailed analysis and comparison; namely, those concerning between 200 and 300 cerebral hemispheres. Numerous conditions of mental disease and defect were represented in the persons of the original owners of these brains.

V.—NEW POINTS OF INFERIORITY, OR DEVIATION OF TYPE OF CONVOLUTIONS AND SULCI.

I will now briefly consider some more or less new points of defective or aberrant development of gyres and fissures which I observed; which were new at the very least in the sense that they were not known to me as being noted by others. Recently, searching for prior observations (if any) in publications not previously seen, I found that certain of these points had place in some detailed description or figure of an individual brain, but, like other unheeded details, had not been the subject of special attention.

Of the special points learned from my observations, I place in the front rank (1) those with greater claim to anomalous characters; in the second rank (2) those with lesser claim. (1) To begin with the former: (*a*) In the first place, I have found anomalies of the cortical architectural conformation decidedly more frequent in the right than in the left cerebral hemisphere, even after making allowance for the fact that, at least according to my observation, the normal standards of right and of left cerebral hemispheres differ somewhat between themselves, in Man. (*b*) Another of the points of *more general* kind expresses itself in irregularity of gyri, and much irregular division and subdivision of them by the unusual aberrant course, depth, length, forking or reduplication of ordinary sulci, or the existence of unusual ones. It is, perhaps, more characteristically marked in the parietal lobe than elsewhere, and especially so in certain forms of mental disease. It is essentially dissimilar, not only on the one hand from an inferior type marked by few and simple gyri and sulci, but also on the other from a normal type of highly-endowed brain, rich in folds and anfractuositities.

Coming to the *more local* points, they are as follows:—The formation of what I have termed a præcuneolus. It consists in the superficial insulation or peninsulation of a portion of the quadrate lobule, usually its upper posterior area, triangular or squarish in shape, or its posterior strip; either on the one hand, and as usually occurs, by a forking or by a reduplication of the inner limb of the parieto-occipital

fissure, or on the other, as occasionally is the case, by a fissure, chiefly a displaced transverse parietal, cutting through from the upper to the mesial hemispherical surface.

This condition has important relations to the annectent gyres, and the island or peninsula is (usually at least) apparently formed by a depressed and unbending mesially-directed anterior continuation fold of the first external parieto-occipital annectent gyrus.

More or less connected or associated with this quadratic anomaly, are some of several aberrant states of both limbs of the parieto-occipital fissure and of the neighbouring annectent gyri, whether superficial or sunken.

The next condition to mention, is the close proximity, in their somewhat parallel course, of the transverse occipital sulcus to the external limb of the parieto-occipital fissure, so that these are only separated from each other by a narrow ridge or very slender fold.

Another is a "reversed occipital operculum," as I term it, in which the simian opercular type is reversed and the occipital lobe takes on somewhat, or slightly, the aspect of a buttress, a sort of curved abutment, under the beetling brow and backward crest of the parietal. Of course a tendency to conformation somewhat resembling that of the simian occipital operculum is a deviation from type long ago observed.

Next is an abnormal variant of the normal issue of the deep temporo-parietal annectent gyri and deep temporal fissure from the first temporal gyre; so that the external surface substance of the latter, or a large portion of it, turns from forming part of the lateral aspect of the temporal lobe, twists sharply, plunges into, and entirely disappears in the Sylvian fissure, and therewith the parallel fissure apparently becomes continuous with the deep temporal fissure, and loses its way in the Sylvian gutter. In such case a variety of aberrant conditions may concern the insulated representative of the true posterior continuation of the parallel fissure, which restarts immediately behind an interrupting, bridging, anastomotic, gyral fold.

Next are furrows from the Sylvian fissure, ploughed vertically part (occasionally two-fifths) of the way up the

middle of the external surface of the central gyri (more often of the posterior one). In some examples these may, perhaps, mark an unusual extent, and somewhat aberrant or less favourite position or duplication of the incisions of the parietal and frontal opercula. (I am less inclined to think they ever may represent duplication of post central or pre-central fissure).

(2). Those of less anomalous character are of the tendency to an irregular, complete, or almost complete, circle of fissures girding the temporal, parietal and occipital regions, from temporo-sphenoidal tip back again to the same (parallel; interparietal, or not; external and internal limbs of parieto-occipital; the "stem"; lingual; and collateral fissures).

And I am inclined to attribute some significance to what I term the formation of a cuneolus, inasmuch as I find it associated with an aberrant, defective and inferior type of conformation of adjacent and other parts. It consists of an unusual form of the now sunken superior internal parieto-occipital annectent gyrus, and of the cleft bordering it posteriorly, which last now drives deeply into the cuneus, ploughing off the upper anterior triangular area of its surface. In some examples, indeed, there is what practically amounts to a forking of the internal parieto-occipital fissure. In transition cases between this and the more usual and normal arrangement, the triangular cortical area (cuneolus) between the forks is somewhat sunken, lying below, that is to say, externally and laterally to, the general mesial surface plane.

And, again, an upper and posterior and irregularly triangular part of the cuneus may be cut off by a transverse occipital fissure, or other and unusually developed fissure, incising the cuneus to the calcarine fissure, or almost so.

The validity here, of the following, relating to temporal gyri and fissures, is not assured, and judgment on it is reserved; but in brains with marks of inferiority I occasionally found the first temporal gyrus partly divided by fissures running upward and backward, the first temporal fissure being in segments so disposed, or given off branches in that direction; and much more often the second temporal gyrus, partly divided by fissurets directed downward and

backward, such practically representing the second temporal fissure, or part of it, in a segmented form. Thus the sections of the latter gyrus and fissure are in a direction at about a right angle to those of the former.

Then there are anomalies of the quadrate lobule, other than that already described above, as, for example, its invasion by extra up curves or branches of the calloso-marginal fissure, or it may be much split by vertical or oblique fissures, or may be the area of conjunction of rami of calloso-marginal and parieto-occipital, or of calloso-marginal and transverse parietal sulci. Extraordinary irregularity may mark the quadrates' fissures, which, as well as the parts of the calloso-marginal anterior thereto, may take the most bizarre arrangement. (In one case, with defective history, a subparietal fissure, very low down, completely isolated the fornicatus from the præcuneus, until after being joined by the transverse parietal, it sank into the sinus of the corpus collosum, very near the posterior border of the præcuneus). The mesial surface above the fissura calloso-marginalis may present an unusual appearance of two distinct tiers of convolutions, and there are other abnormalities relating to that fissure, to the fornicatus, etc., which have hitherto received but little notice.

Again, the parietal gyres, especially the lower tier, may be much and irregularly split and divided by bi- and trifurcation, or by an unusual branching, or by unusual and prolonged extension of fissures, of the first temporal especially; also by irregularity and zigzag state of interparietal fissure, and of unusual fissures, as, for example, a far-descending and perhaps forking external limb of parieto-occipital fissure, or sulcus intermedius of Jensen, or even transverse parietal or other fissure from the great longitudinal interhemispherical cleft. Important, here, is the first temporal fissure, with its abnormally zigzagging extensive course, branchings and spurs, also its numerous confluences with many sulci.

Similarly the upper parietal tier may be affected, and one, two, three, or four fissures may partly divide the superior parietal lobule into several gyres running obliquely backward and inward to the hemispherical edge, and thence

over the cliff, and often descending more or less on the mesial quadratic surface in the abyss of the great longitudinal chasm.

The frontal gyres, particularly the third frontal, may be channelled by fissures, not only by the vertical limb of the Sylvian and by the inferior precentral fissure, but also by an unusual fissure, or more than one, between those two. These occasionally may ascend high up, even to the first frontal fissure or to the great longitudinal. They may send off a backward spur. Occasionally, there is a fissure in front of and parallel with an upper precentral fissure; or, again, a far extension of an upward and forward line of the trunk of an inferior precentral sulcus.

The second and third frontal gyri (and partially the first) are sometimes unusually twisted in their forward course so as to trend forward, upward, and inward, taking a diagonal direction (as if the two former sought the frontal tip, the last the mesial aspect); a deviant line of direction and oblique thrust of the frontal gyri. Therewith the frontal convolutions may, more than usually, be ploughed or subdivided by short fissurets directed forward, upward, and inward.

An islet of cerebral cortex is occasionally formed by unusual aberrant forking of principal fissures, the spurs fully reuniting after enclosing an islet of cortex; for example, by the central, interparietal, or parallel fissure.

But, beside this, and as previously described by others, large islands of cortex may be insulated by communications of sulci, chiefly of primary ones, that is to say, the shores of the irregular islands are formed by conjunction of several different sulci, of which some may be either supernumerary or unusually developed fissures.

And, besides, as in this last, I would redirect attention to several points which have been published by others; as, for example, a false appearance as of two or of three fissures of Rolando, owing to extremely bold definition either of the precentral or of the postcentral fissure or of both. Or, again, for example, the fact that the supero-lateral frontal surface may be divided more or less into four tiers of convolutions. A division into four tiers was one of the departures from

type which my early necroscopical investigations taught me. But it was published by Benedikt at an earlier date. Differing from him, I found the division into four tiers to be rather oftener due to division of the second than of the first frontal gyrus. Some anatomists, indeed, admit a sulcus of the second frontal gyre, and an abnormal development of this would give rise to the appearance referred to. Benedikt, who deals skillfully and acutely with the subject of fissural anomalies, seems to lose sight of this in his strong support of the relatively predominant importance here of the division of the first frontal gyrus. And I have observed several examples of more or less marked division of this frontal surface into five tiers of convolutions.

VI.—DEVIATIONS FROM TYPE PUBLISHED BY SEVERAL OBSERVERS.

Other observers have found a number of deviations occurring in brains of a low order, as, for example, those of certain kinds of criminals, those of some persons of weak intellect or insane. Of these deviations, I found reason to accept some as being significant, to reject others, and to accept still others in a partial manner only; only partially accepting these inasmuch as they are valid only when in conjunction with other specific conditions, disjoined from which they cease to have the same significance; in some cases, indeed, bear an entirely different meaning. Like words in a sentence, their meaning varies with their context.

Conjoining the deviations adopted from other observers with the new ones already described, the material is provided for standards or criteria of various forms of defective or aberrant brain development. Therefore, the standard to which I shall presently advert has material derived from two factors, the one being what has been accepted from other observers, the other being what I have found for myself, as being anomalous; and the standard is directly drawn from certain brains.

But it is in relation to one great group of mental diseases that these peculiarities of brain architecture are especially valid and enlightening. I refer to the great group of

mental diseases which are essentially based in hereditary mental degeneracy, that group in which there are more or less the recognized signs of degeneracy of mind and body, in the family or collaterals, in the individual or in the stock from which he springs.

These factors of heredity and of degeneracy, of course, do not play an equally important part in all of such forms of mental disease as are assumed here.

VII.—REFERENCE TO A STANDARD OF ABERRANT CON-
FORMATIONS OF GYRES AND FISSURES FRAMED
AS A TEST, AND CONSTITUTING A
STIGMA, OF HEREDITARY MEN-
TAL DEGENERACY.

Throughout the above large group of mental diseases the somatic and psychic stigmata of degeneracy obtain more or less, but their form and grade differ much in the different members of it. In points of detail this subject is one of contention: but as to the broad general fact of the existence of such signs or indications of hereditary mental degeneracy, I do not entertain the slightest doubt. And I have formed a composite and sufficient elastic standard of abnormal superficial brain architecture—that is to say, of configuration of gyres and fissures—to use as the test and criterion both of the existence, and of the degree, of the degenerate, defective and aberrant developmental peculiarities found in the brain in the several forms of predominantly hereditary mental diseases.

It is not drawn from profound idiocy with its prevailing record of pathological disaster, or of gross teratological malformation; for there are weighty reasons why such a standard not seldom would be defectively applicable, and even misleading. But it is drawn from cases in which, with more or less of the somatic and psychic signs of hereditary mental degeneracy, there are inately defective and weak mental powers, with mental peculiarities or mental perversions (degrees and forms of imbecility and original paranoia, and allied states).

Broadly and summarily viewed it amounts to a somatic indication, a sign-group or stigma of the insane neuropathic diathesis or hereditary mental degeneracy. As such it is valid when applied to the other forms of mental disease constituting the large group already mentioned, inasmuch as each of them (speaking in generals and in summary) is found to present a brain configuration differing from this standard one approximately about as much as the form of mental affection itself differs clinically and nosologically from the cases yielding the standard conformation of brain. And, indeed, while confirming the general accuracy of my classification, the application of this standard has solved or confirmed doubts on one or two points on which judgment had previously been held in suspense.

From other of these forms of mental defect and disease a standard might have been taken and used with various degrees of success; the one I have selected I believe to be far the best and most useful. The standard is one of mobile applicability and not of cast-iron rigidity, and affords due room for differences in detail. Not every brain of a given psychosis of the group concerned presents the same features or the same combination of them; just as, clinically, not every case of a given disease presents the same set of symptoms, or every symptom, typically present and full-blown. Precisely as with other somatic stigmata, such as the deviations from normal manifest in teeth, palate, or skull; so here the deviation is far from being always one and the same; and, moreover, certain combinations have stigmatic value.

There is not time to pursue this part of the subject further. For the present, it suffices to announce the framing of the standard. Full description of the results of its application is reserved for future communication to the profession.

Hysterical Deafness and Aphasia in a Male Patient—Excessive Masturbation in a Girl of Seven Years.

By EMORY LANPHEAR, M. D., Ph. D., St. Louis, Mo.

Formerly Professor of Operative Surgery and Clinical Surgery in the Kansas City Medical College and Professor of Principles and Practice of Surgery in the St. Louis College of Physicians and Surgeons.

IN reviewing Vol. XXVII of my case records, I find two cases of unusual interest; one of hysteria in the male—the other a very young, and inveterate masturbator of the female sex.

HYSTERICAL DEAFNESS AND APHASIA IN THE MALE.

A. C. D., 42 years of age, unmarried, of previous good health, though always “nervous” and of neurotic family history, I saw first on March 25th, 1891, in consultation with his physician, Dr. E. J. Dennis. For several weeks he had been “living with” a woman and indulging in sexual intercourse to an immoderate degree—from three to six times each night for the first three weeks, but less frequently thereafter as he found his sexual powers becoming weakened; at this discovery he became very anxious about himself, and began taking arsenic, damiana and phosphorus in heavy doses, but in spite of these stimuli he finally lost the power of erection and consulted the doctor; who counselled separation from the woman. His advise was followed—much to the disgust of the nymphomaniac with whom he had been sleeping, so that a stormy scene greatly agitated the patient late on the night of March 22, when the parting took place. On awakening next morning he was astonished to find he could neither hear a sound nor speak a word, even in a whisper, and

that his right arm and leg were affected with numbness as if "asleep;" but he could walk—with difficulty—and hastened to the doctor in great agitation. He, thinking it a transient matter, administered a little valerianate of ammonium every hour, as a kind of placebo, and put him in bed. The same condition of affairs continued on the 24th, and on the 25th I was asked by the doctor to take charge of the case.

Upon trial I found the patient could write in a tremulous sort of way (he was a fine penman, a book-keeper) and so could answer questions. After several enquiries, carefully and intelligently answered, I wrote: "Have you had any previous nervous trouble?" He answered: "Yes; after a long debauch, in which I drank heavily and had very excessive intercourse I had trouble with my hands; it was two years ago. Dr. Bingham said it was caused by smoking." "What kind of trouble with your hands?" "I was then in the Dairy Business and could not close my hands enough to milk a cow; and they trembled violently." He said this trouble passed away in a few weeks and he considered himself in perfect health until he began drinking heavily two months before and became associated with the woman in the case.

Examination showed almost complete hemianæsthesia of the right side, but no motor paralysis—though the tongue deviated markedly to the right upon protrusion. The anæsthesia was for pain chiefly; the skin reflexes were abolished; the mucous surfaces were affected; and there was a fine tremor of the right side—which gave the tremulousness in penmanship. The ophthalmoscope showed no retinal disturbance. Dr. J. H. Thompson, Professor of Ophthalmology and Otology in the Kansas City Medical College, participated in the examination and agreed with this statement; nor was there any discoverable disease of the ear. There was no paralysis of the vocal cords. The patellar tendon reflexes we expected to find exaggerated—but they were almost totally abolished, yet there were no other signs of spinal sclerosis. He staggered very slightly in walking.

The most careful tests were made to detect malingering.

ing. He was stuck with pins at the most unexpected moments; when upon the anæsthetic side without recognition; when upon the sensitive side he jumped and his face and actions were expressive of great pain, but there was no involuntary exclamation. When a pistol was fired within a foot of his ear, behind him while he was engaged in writing industriously, there was not the slightest start or facial indication to show that it was heard. We therefore concluded that it was a pure hysterical affection, and assured him in writing that the trouble would disappear under appropriate treatment—possibly as suddenly as it appeared. He was not hypnotizable.

He was ordered a Turkish bath once daily with a very strong Faradic current to the spine and anæsthetic side and internally

℞ Potasii bromidi	12	(℥iii.)
Extr. ergotæ fluidi	16	(℥ss.)
Mucilag. acaciæ ad	128	(℥iv.)

Misce. Sig: Teaspoonful every four hours.

March 27, he could sound the vowels *o* and *a* and wrote that he felt a little better and that he could hear the sharp upper notes on a piano or guitar. After finding he could say "oh" I wrote, "Can't you talk any yet?" "No." "Can't you say 'D—n it?'" He replied in writing: "You bet"—but he couldn't. The treatment was continued; but baths stopped.

Under the bromide mixture the nervousness of the patient became much less marked, and his anxiety about himself appeared to diminish rapidly. March 29 he was able to hear a few words when spoken to in a very loud tone of voice. He complained of some pain in the head and disturbed sleep; so the following prescription was substituted for the first:

℞ Sodii bromidi	8	(℥ii.)
Codeinæ sulphatis	0.2	(gr.iii.)
Elixir. ammonii valerianatis	48	(℥iss.)
Aquæ pur.	16	(℥ss.)

Misce. Sig: Teaspoonful in water every four hours.

April 1, he could hear when spoken to in a fairly loud

voice, and could speak in a mumbling sort of way. The treatment was continued.

April 4, saw him nearly well so that he could converse readily. He characterized his illness as "a narrow escape." The tremor was nearly gone but the anæsthesia persisted.

On the 4th of May he again presented himself for treatment—this time for a recently contracted gonorrhœa. All signs of the hysterical attack had disappeared except the anæsthesia—which was far less marked—and examination showed existence of a high degree of concentric limitation of the visual field, most marked on the side of the anæsthesia; I did not test him for disturbances of the color sense. He was put on a tonic treatment.

He disappeared on May 22nd, since which I have never seen or heard from him. I doubt not he has had other hysterical manifestations of some character since that time.

EXCESSIVE MASTURBATION IN A YOUNG FEMALE.

Dr. C. D. McDonald, of Kansas City, on May 13th, 1891, called me in consultation in the case of Hazel D., a most beautiful child seven years of age. She was of good family without neurotic taint and with no perversions or stigmata upon either maternal or paternal side.

When three years of age she was found producing friction of the vagina with her index and middle fingers, and upon being watched was found to be in the habit of masturbating two or three times each night. At this time she was examined by a physician and no abnormal condition of the genitals found except a slight hyperæmia. Under proper treatment she seemed to be cured, becoming a plump, bright, exceedingly intelligent child. She was sent to school at the age of six. Soon numerous reports came in that she was having intercourse daily with a number of boys, ranging from ten to fifteen years of age, and upon investigation this was found to be true. She was withdrawn from school and kept from the companionship of boys, but occasionally would escape from home and invariably would be caught under some back stairs or in an alley enjoying herself in the sexual act with some playmate.

She was then confined strictly to the house and was directly caught masturbating; in this practice she kept getting worse in spite of almost constant watching; the moment her mother's or sister's gaze would be directed elsewhere her hands would go under her clothing and the excitement begun. At last she became so bad that unless her hands were tied she would attempt to masturbate regardless of who might see her. At this time (when her hands were tied) she would sit for hours gazing into vacancy; mentally she appeared dull and stupid, paying no attention whatever to books or playthings, never engaging in conversation—briefly answering “yes” or “no” to inquiries or disdaining to answer if she felt so inclined; she lost flesh rapidly, became pallid with dark circles around the eyes; she ate little, preferring to sit at table and secretly titillate the clitoris and vagina until repeated orgasms were produced and she would become limp and listless; but her sleep was good.

Dr. Charles W. Adams, Professor of Gynæcology in the University Medical College of Kansas City, examined her with me. We found the *mons veneris* and clitoris exceedingly large—as large as in a fully developed woman; the vagina and hymen somewhat congested; the hymen greatly stretched. During our manipulations, slight as they were, the girl became very animated, the pupils dilated, the breathing hurried, the sphincter *vaginæ* contracted and finally an orgasm occurred—at which the girl sank back with a sigh of satisfaction. No pathological condition of the rectum or of the genitals could be detected. We therefore concluded the irritation to be of central origin.

My advice was to send the patient to the country for the summer, with constant out-door life and a vigilant, pleasant companion who would prevent her masturbating during the day, using the straps at night until she could be trusted without; with moral suasion, and the internal use of

R Potasii bromidi	16	(3ss)
Extracti salicis nigrae fluidi		
Mucilag. acaciæ, aa	64	(3ij)

Misce. Sig. Teaspoonful after meals and at bedtime. With this, good, rich food and enough exercise daily to make her tired.

The fluid extract of "pussy willow" was prescribed because with some patients it acts as a most powerful sexual sedative.

We tried to hypnotize her in order to use "suggestion," but she only laughed at the attempt. She took the mixture until July 18th, at which time I saw her again. She was looking much better, was quite bright intellectually and said she believed she could control her inclinations if not watched—in fact she asserted that she did not want to masturbate any more, and she seemed really anxious to get well. At this visit I discovered that she was very "forward" in her studies, and that she was as well informed upon most subjects as the average woman of the middle class. I advised the following prescriptions:

℞ Sodii bromidi	20	(℥v)
Tinct. hyoscyami	32	(℥i)
Elix. simplicis	64	(℥ij)
Misce. Sig. Teaspoonful after each meal.		

℞ Quininæ sulphat	3	(℥ij)
Camphoræ monobrom	2	(℥ss)
Ferri sulphat. exsicc.	1.5	(℥l)

Misce et ft. capsul No. XL. Sig. One capsule one hour after each meal.

The iron was given on account of the anæmic condition. After two bottles of the mixture were taken the compound syrup of hypophosphites was substituted but the capsules were continued.

She improved rapidly, so that in the autumn she was placed in a convent to pursue her studies. At Christmas time she was reported as in excellent condition, but since that date no details have been obtainable. The prognosis in such a case is an interesting, but unanswerable question.

SELECTIONS.

NEUROTHERAPY.

THE GENERAL THERAPEUTIC EFFECT OF THE ALTERNATIVE ELECTRIC CURRENT OF HIGH FREQUENCY AND OF HIGH TENSION, by Dr. G. Apostoli, of Paris.

Dr. Apostoli, together with Dr. Berlioz, on the 18th of March, 1895, presented a paper on the above mentioned subject to the Academy of Sciences of Paris. He now, after longer and riper experience, desires to present a summary statement of his general conclusions.

1° According to Professor d'Arsonval's discoveries alternative currents of high frequency and of high tension, exert a powerful action upon all living bodies submitted to their inductive influence.

2° The best method of applying these induced currents is to place the patient, free from all contact with electrodes, in the circuit of a large solenoid traversed by these currents.

The patient being thus completely insulated the currents, which circulate in his body by *auto-conduction*, have their origin in his tissues. The body plays the role of a closed induced circuit.

3° By this method the physiological discoveries of Professor d'Arsonval are confirmed and we are able to prove the powerful influence of these currents upon the *vasa-motor* system—although they produce absolutely no sensation and although they have no apparent effect upon the motor or sensory nerves.

These currents have nevertheless a powerful action upon all the nutritive functions; as has been verified by Dr. d'Arsonval's numerous analyses of the gaseous products of respiration and by Dr. Berlioz's not less numerous analyses of the urinary excreta.

4° The general therapeutic applications to be deduced from this physiological action are confirmed by clinical observation.

Dr. Apostoli has now treated more than a *hundred* patients by this method at his clinic and at his private consultation rooms. The greater number of these patients have been greatly benefitted by this new treatment which, be it remarked, has been used to the exclusion of all other forms of medication, dietetic or otherwise.

5° These currents exert in the majority of cases a most powerful and generally beneficial action upon diseases due to *slackening of the nutrition* by accelerating organic exchanges and combustion. This is proved by analyses of the urine made by Dr. Berlioz, of which the following is a brief résumé:

The quantity becomes more normal; the products of organic waste are better eliminated.

The *increased combustion* is shown by the diminution of *uric acid*, while the percentage of *urea* is generally increased. The relative proportion of these two substances changes under treatment so as to reach in general the figure 1-40.

The elimination of the mineral products is also changed, but in a manner less marked.

6° When daily séances are given, each lasting 15 minutes, we may generally observe in patients submitted to the influence of these currents the following modifications in their general condition. We mention them in the order of their occurrence:

Return of sleep.

Increase of strength and vital energy.

Increase of gaiety, of power for work and ability to walk.

Improvement of appetite, etc.

In short, *general progressive improvement*.

This general improvement often manifests itself after first séances before any local influence is apparent and before any change has occurred in the urinary secretions.

7° Local pain and trophic changes are often more slowly affected by these currents and at times they are entirely refractory for a longer or shorter period.

In such cases the same currents must be applied locally by contact with the electrodes.

This subject will be treated later on in a separate communication.

8° The diseases which have appeared incurable by this treatment are those not associated with well-defined organic changes such as *hysteria* and certain forms of *neurasthenia*.

Dr. Apostoli has also observed that certain *localized neuralgias* are refractory to this form of currents they require its more direct local application.

9° The diseases which have derived most benefit from this therapeutic agent, belong to the *arthritic class*, *rheumatism* and *gout*.

10° In certain *diabetic* subjects the sugar has disappeared altogether from the urine under the influence of these currents, while in others there has been no such change notwithstanding the manifest and constant improvement in the general condition.

Is this difference due to the imperfection of the electric apparatus or to the manner of its application? It is hoped that further experience will soon afford an answer to this question; although the fact that diabetes has many different causes, may in itself explain the difference in the results obtained by this treatment.

11° In conclusion, the currents of high frequency and of high tension introduced into electro-therapeutics by Dr. d'Arsonval greatly increase the field of action of medical electricity.

They furnish general medicine with a new and valuable means of treatment, capable of modifying more or less profoundly the processes of nutrition.

APOCODEINE HYDROCHLORATE IN INSANITY.—Toy has used this drug in forty cases of mania (Sem. Med. XV, 1895), during the excited period, in doses ranging from $\frac{1}{3}$ to 1 grain, given either internally or hypodermatically. The remedy at all times diminished excitement and often produced sleep, lasting for a few hours. Its ingestion or

injection excites intestinal peristalsis. Its use has always been followed by at least one, but sometimes two or even three, movements of the bowels. It has not caused vomiting.

STRONTIUM BROMIDE IN EPILEPSY.—Among the recent applicants for medical favor in this line has been the bromide of strontium (Paraf-Javal), purporting to be a salt free from the impurities of the ordinary commercial article, which render it unfit for continued use, or even poisonous in moderate doses. This statement as to its non-toxic action we have found to be well founded, no evil result having followed 30-grain doses repeated thrice daily, and no case that has been treated with the salt has shown other than beneficial results. Above all, we have to note continued absence of a bromide acne (even the disappearance of the rash, though it was present when the use of the strontium was commenced), a very much lessened somnolent effect, the patients without exception appearing brighter and more cheerful under its use than with the sodium salt, and finally certain excitable cases were less quarrelsome after a seizure, than under the every day treatment; points all of very considerable value, both in private and asylum practice.—*Times and Register*.

A NEW TREATMENT FOR EPILEPSY.—Dr. Von Bechterew employs the following combination in the treatment of this disease: Adonis vernalis leaves, 2 to 4 grammes; infuse in boiling water, 180, then add bromide of potassium, 5·7 to 11·25 grammes; codeine, 12 to 18 centigrms. From four to eight tablespoonfuls daily in water or sweetened milk.

Professor von Bechterew has never met with a single case of epilepsy in which it did not considerably lessen the number and intensity of the attacks. Not infrequently the convulsive paroxysms rapidly and completely disappeared.

The favorable effect of the addition of adonis vernalis to the bromide, Prof. von Bechterew attributes to the constrictive action of the medicament on the cerebral vessels. The adonis vernalis may be replaced by digitalis, but this combination is not so convenient and is less satisfactory,

inasmuch as digitalis cannot be administered continuously on account of its cumulative effect.

TENDON TRANSPLANTATION IN INFANTILE PARALYSIS.—Dr. J. E. Goldthwaite, in a paper read before the American Orthopædic Association, called attention to the possibility of furnishing better mechanical attachments for certain non-paralyzed, or only partially paralyzed, muscles, as a part of the treatment of infantile paralysis. A certain number of cases were reported with results that were most gratifying, and from which it appears not unreasonable to class tendon transplantation with tenotomy and the other surgical procedures which have a place in the treatment of this condition. At the knee, undoubtedly, tendon transplantation could be employed to advantage in a certain limited number of cases, and possibly at some of the other articulations, although the best results are to be looked for in those portions of the body where the tendons are well formed and lie superficially. The operation is not to be attempted upon the tendons of muscles which are wholly paralyzed, except possibly in rare instances for the purpose of furnishing an additional support of a purely tendinous character. It is conceivable that in the foot, for instance, if the tendons on the inner side are more atrophied and offer less resistance than those on the outer side, these tendons might be attached to the inner side and thus increase the lateral support. This is merely a suggestion, however, it not having been tried practically, and the benefit to be derived therefrom would undoubtedly be slight. There is also a question as to whether or not, two atrophied tendons would unite firmly, although from watching the other cases, Dr. Goldthwaite doubts if there would be any trouble on this account. The best results from tendon transplantation are to be obtained in those cases in which one group of muscles has been destroyed, leaving the antagonizing or accessory muscles very little, if any, impaired. This results in a definite deformity which becomes more marked as the age increases. The best illustration of this is to be found in the condition so commonly seen in the foot where the

gastrocnemius and the muscles at the inner side of the foot have been destroyed, the peroneal muscles retaining their normal contractility. The result is a valgus which constantly increases, both from the muscular contraction and from the faulty mechanical position in which the weight of the body must be received upon the foot in walking or in standing. This is also seen in connection with the anterior muscles of the foot; the anterior tibial and the extensor pollicis so often being destroyed leaves the peroneus tertius and the extensor communis digitorum, the only muscles to be used in flexing the foot at the ankle. This also results in a valgus which steadily increases. To correct these mechanical conditions and to use the non-paralyzed muscles to the best advantage, Dr. Goldthwaite had successfully operated upon four cases and given the tendons of the muscles new attachments.

PSYCHIATRY.

SPINAL CONCUSSION AND INSANITY.—Dr. H. A. Tomlinson of St. Peter (Minn.) Insane Hospital states (N. W. Lancet, July, 1895) that mental symptoms of spinal concussion are as a rule not sufficiently conspicuous to attract attention, and are dominated by the other symptoms referable to the general nervous system. However, mental aberration does exist in most cases of spinal concussion, varying in degree according to the natural stability of the victim's mental organization. This is manifested by the change of character, which as a rule is permanent; the failure of memory and attention; the lessened or lost capacity for continuous mental effort; and even in the mildest cases, the loss of self-control, manifested by impatience, irritability and complete loss of "grit", so that the victim succumbs to trifling disturbances, is exhausted by slight muscular effort, and on account of these conditions becomes abnormally self-conscious recording all experiences in a staccato key and looking upon every relation in life from the stand point of individual personality; realizing vividly

the responsibility of others toward themselves, which they magnify, but losing sight entirely of their responsibility toward others. These are the most unhappy people in the world, living always on a transcendental plane of nervous erethism, magnifying every ordinary sensation into a profound emotion, seeing in every call for muscular effort an herculean task, and resenting the apparent want of sympathy shown in the failure of those around them to appreciate things as they see them; while at the same time their exaggerated egotism makes it impossible for them to realize that there is any other standard but their own. From this form down to actual mania or degenerative insanity there may be all grades of reduction. As a rule, however, when the mental symptoms become conspicuous enough to make the victim's seclusion necessary, the spinal symptoms are lost sight of in the insanity, and it is no longer regarded as a case of spinal concussion. Yet the shock was the determining cause of the insanity, just as much as it is the cause of the neurasthenic symptoms supposed to be typical of spinal concussion.

PHYSICAL CONSEQUENCES OF HYPNOTISM.—Dr. Chas. Howard, in a paper before the late Medico Legal Society, reported a case in which he had caused an honest man to commit theft. The man was accused after he had become restored to his normal condition, protested his innocence most honestly, but the stolen property was found on him, whereupon the man was so shocked that he went into a cataleptic condition, in which he remained for some days. Dr. Howard naively added that the man's brain was, he believed, permanently injured and that as a physician he had employed more precautions in his experiment since that time. Dr. E. C. Spitzka in the Guiteau trial testified that while no person not predisposed, could be made insane by hypnotism, no person could be frequently hypnotized without being injured. Animals used as subjects become paralytic. The cerebral vaso-motor disturbance concomitant on hypnotism must inevitably produce local secondary changes. Dr. Howard, unless the experiments were with the subject's consent, has

placed himself in a dangerous forensic position. The undue tendency to hypnotic experiment just now prevalent merits rebuke.

PSYCHOPATHIC FAMILIES.—Perugia (*Revist. Sper.*, XX, p. 68) presents the following conclusions on this subject:

1. The morbid types are not transmitted in psychopathic families in identical forms, but become aggravated in their transmission through the generations.

2. Suicidal insanity only is constantly transmitted to descendants in the same form.

3. Among the various insane types the periodical form is relatively frequent.

4. The somatic signs of degeneracy are much more frequent than in non-hereditary lunatics, but are not aggravated proportionately to the psychic degeneracy.

5. Very often sexual abuses, alcoholism, morphinism, and onanism are concomitant causes aggravating the heredity in these families.

6. Bodily diseases attack the hereditarily insane with more than ordinary frequency.

7. Maternal hereditary is propagated to the greater number of descendants.

8. Psychopathic families have a fatal tendency to intermix and fuse among themselves, thus re-enforcing the heredity.

9. The psychopathic hereditary affects both sexes equally.

10. Psychopathic families, especially those in whom the heredity is bilateral, are doomed to extinction, as much by their great mortality in infancy as the sterility of their marriages.

INSANITY AFTER GYNAECOLOGICAL OPERATIONS.—

The relative frequency of mental trouble after gynæcological operations is still on undetermined point. Some gynæcologists of very large practice seem rarely, if ever, to have met with cases of mental disturbance after hysterectomy. Others have had quite the opposite experience. A recent discussion in the Belgian Society of Gynæcology again

directs attention to the subject. Baldy, of Philadelphia, in 1892, submitted a paper to the American Gynæcological Society, in which he related two cases of his own, one consecutive to an operation for rectocele, the other following oöphorectomy. He also quoted fifteen cases from various authors. His conclusions were: (1) Grave mental trouble may supervene after operations among patients who have had no former history of hereditary or personal madness; (2) insanity is much more frequent after operations performed upon the genital organs, than after operations upon any other part of the body, and is quite as usual in men as in women; (3) the operations may be regarded as the cause of the insanity in such cases as have no antecedent history; (4) insanity coming on some months after surgical operation is undoubtedly not due to surgical intervention; (5) insanity may happen even when the results of the operation have been perfect; (6) the existence of a neurotic predisposition ought to stay the surgeon's hand, except in cases of absolute injury; (7) post-partum insanity is more common than is generally believed.

Dr. Warton Sinkler also believes that insanity after oöphorectomy is especially frequent. Goodell, Kelly, Price and many other eminent American gynæcologists agree that the uterine adnexes ought never to be removed for simple nervous conditions. Sinkler writes: "After operations the patients are more nervous than before; mental troubles of diverse forms, insanity and epilepsy are frequently the results."

During the discussion in the Society of Surgery, of Paris, in 1892, Regnier reported many cases of insanity occurring in neurasthenic patients after operations on the genital organs. Again, in 1893, he insisted upon the risks with which even the apparently slightest operations were attended.

A case is cited, subsequent to an operation for double oöphorectomy and irreducible uterine retroflexion; the patient, eight days after the operation, was the subject of hallucinations and delirium, and ended his existence by committing suicide.—*Medicine*.

TREMOR IN INSANITY.—Christiani (Revist. Sper.) concludes from experimental researches that in insanity, generally of all the various forms, we may meet with tremors, independently of other factors, due solely to the altered functions of the psychic sphere. These tremors are of the "intention" kind, ceasing during repose. They can not be referred to any single form of mental disorder, but are solely connected with the two fundamental symptoms of excitement and depression. In excitement the tremor is vibratory, more frequent, arhythmic and unequal; in depression, it is undulatory, slower and more rhythmic. The tremors of the insane have a pathogenic mechanism and a semiotic significance that may be stated to depend on a functional dissolution of the nerve center, and a weakness, incoordination, and dissipation of the psychomotor energy was presumed to be absent. No benefit was derived from antisyphilitic treatment, nor were any alterations of a specially syphilitic character found on examination post mortem.—*Bost. Med. and Surg. Jour.*

HYSTERIA AND DEGENERACY.—Joffery, in the discussion on hysteria in its relations to insanity, at the French Congress of Alienists, concludes as follows;

1. Hysteria is one of the forms of mental degeneracy.
2. In its limits, hysteria is confused with certain degenerative manifestations, without its being possible to fix between them any definite limits.
3. Clinically, the individuality of hysteria should be preserved as much as possible from the other forms of mental degeneracy.
4. Therefore, the term hysterical should be applied only to the phenomena of the complete or partial attack, or to manifestations that are clearly hysterical, like spontaneous somnambulism, or to those directly connected with hysteria.

CLINICAL PSYCHIATRY.

HYPNOTIC CONFESSIONS.—Judge Ellison, of Anderson, Ind., has been indulging in, at the present status of psy-

chiatry, an extra-judical performance. A man named Geo. Hires was sentenced by Judge Ellison to thirteen years in the penitentiary, on conviction of the murder of William Foust, July 8th last. The main witness against him was Maggie Botton. After the trial she confessed that her testimony was false, and that she herself had done the deed. Dr. J. B. Callen, who claims to have hypnotic powers, was granted permission to place the woman in the hypnotic state to ascertain which of her statements was the correct one. Judge Ellison, the official Court Stenographer and Dr. Callen went to the hospital where Mrs. Botton was said to be on her deathbed from consumption, and in the presence of these witnesses, soon had the woman in the hypnotic state. Mrs. Botton spoke in a loud, clear tone, though heretofore, on account of her weakness, she was scarcely able to whisper. Mrs Botton said the shot that killed Foust was fired by Hires. Her confession that she had done the deed was extorted from her by Hires, who said the authorities suspected her son. She then shouldered the crime to shield her son. After she had been brought out of the hypnotic state she did not remember anything of what she had just told.

Such attempts are scientifically unjustifiable since the influence of leading questions producing suggestion cannot be excluded. A claimant for hypnotic powers rarely has a sufficiently judical temperament to entitle his results to acceptance without rigid scrutiny. The undue influence of the mind of the hypnotizer projected on the mind of the subject cannot be legally so excluded as to entitle the result to credit. The law refuses to probate wills where undue influence is suspected. In criminal cases the presumption of innocence exacts rigid exclusion of evidence obtained where there is even the possibility of suggestion. In the event of the non-granting of a new trial, the Indiana Supreme Court cannot fail to denounce such extra-judical methods of obtaining evidence which recall the witchcraft epoch.

HYSTERICAL APHONIA AND HYPNOTISM.—Hysterical Aphonia, when its neurotic nature is unrecognized, is pecu-

liarily obstinate in resistance to treatment. The possibility that it may set up secondary laryngeal changes charitably serves to explain the many instances where spot specialistic laryngologists diagnose serious lesions in hysterical aphonia. In one recent instance a hysterical female was frightened by burglars and became hysterically aphonic. Laryngologists treated her for years without effect. She has recently been hypnotically cured by a stockholder in a New York post-graduate school who, ingeniously suppressing all reference to hysteria, gives a graphic description of his hypnotization of the woman into remembering the scene with the burglars and to this refers her cure.

HYPNOTISM AS A MORAL FORCE.—According to the *Journal of the American Medical Association*, an attempt is being seriously made under local governmental auspices of Utah, to reform criminals by hypnotism. Evil is to be eradicated and moral tendencies instilled into the criminal by passes and suggestions; whether the criminal has a will to be moral or not, he is to be made so. On the other hand, there comes from Germany the proposition to cure sexual perverts by the same means, but the foreigner is either less hopeful or more immoral, in that he proposes to substitute a less repulsive style of immorality for the existing tendencies of the subjects. He is perhaps a little less extravagant, if he is also less respectable in his ideas than the Utah practitioner, but it is hard to see why they are not almost equally irrational. Hypnotism ought to be understood by the people and by medical men in particular, if the amount of literature on the subject could enlighten them, but there still seems to be a widely spread superstition which a few in the profession seem to share, that there is an occult force in the hypnotizer which his victim can not resist. And hypnotism as a moral force, usurping the place of training and religion, is comparatively a new extension of the superstition. The *Journal of the American Medical Association* seems to be totally ignorant of the principle underlying suggestion therapy, of the value of inhibition and the power that suggested healthy, exert over morbid ideas, even in the

insane. This last principle underlies hospital treatment in psychiatry, otherwise it becomes psychologically absurd.

NEURO-SURGERY.

CLITORIDECTOMY IN INSANITY.—Dr. Clara Barrus of the Middletown (N. Y.) Insane Hospital, remarks that: (*Amer. Jour. of Insanity*, April 1895), "Hardly any condition among the insane is so deplorable in its manifestations as masturbation. It occurs in women, by nature and training refined and cultured, and is often accompanied by incredible obscenity of thought, speech and manner. Hypertrophy of the nymphæ or of the clitoris are said to be signs of masturbation, yet these anomalies are often found in non-masturbatory cases. In many cases the perversion is found in patients with normal vulvæ, where the nymphæ and clitoris are very small or where they are practically absent. Repeated genital excitation by masturbation probably results in external genital hyperæmia, as well as of the uterus and its adnexa. Hyperæmia frequently induced, leads to congestion, and congestion to hypertrophy as a result of the exaggerated nutrition of these organs. But just why this hypertrophy should not result in all masturbatory cases it is difficult to determine. Sometimes hypertrophy of one nymphæ only is found. The secretion of the præputium clitoridis is often a hardened semi-organized mass, so hard sometimes as to merit the term concretion; the mass being held there by a sort of superficial prepuce adhesion, in many cases removed with difficulty. That this should give rise to nervous irritation which would in many cases lead to pruritus and subsequently to masturbation is not surprising. "Orificial" enthusiasts would probably assert that masturbation when present is the direct result of this condition alone. From the anatomical structure of this organ and its nerve supply it is obvious that secretion retained as above described may exert a pernicious influence on the female economy. The removal of such secretion and the destruction of the adhesions naturally leads to hope of

ameliorating the mental condition. While this condition is often associated with masturbation it also occurs in cases where the habit does not exist. The conditions may, however, have given rise to other nervous disturbances quite as pernicious, if not to masturbation itself. In dementia amelioration of the mental disorder cannot be expected even though the conditions be removed. At the same time it would be an unjustifiable neglect to fail to remove when possible a condition which may exert a pernicious influence on the nervous system. Not so the condition of clitoris elongation, the operation for the removal of which is so much in vogue. It seems a very reprehensible practice. The worst case of masturbation Dr. Barrus has seen is that of a young woman who has been clitoridectomized. This patient masturbated more or less all her life. After several attacks of nymphomania she decided to have the clitoris amputated. The operation increased the nymphomania, causing shameless—almost continuous—masturbation. Some cases persist in the habit in spite of everything that can be done—padded mitts, restraining of hands and feet, the protection sheet, moral suasion. All means are tried to protect the patient from herself with the result of seeing her when thwarted exhibit manifestations which show that she is indulging in a sort of vicarious mental masturbation, the center of excitement apparently being psychical.

OOPHORECTOMY AND SEXUAL APPETITE.—Dr. M. A. Colman, of Chicago, reports a case (*Medical Standard*, Aug. 1895) of rectum gonorrhœa of unusual ætiology. The patient had a two-inch vagina. Neither ovaries nor uterus were detectable. She had been married some years. Coitus had always been by the rectum as it was painful by the vagina. The patient admitted volupty by rectal coitus. The husband had contracted gonorrhœa and infected his wife, who is somewhat hysterical. Vaginal examination results in vaginismus. This is spasmodic and paroxysmal in type according to the patient, who states that she has monthly periods of intense voluptuousness almost amounting to nymphomania. These are followed by a mucoid discharge from the vagina. Dr. Clara Barrus reports (*Amer. Jour. of*

Insanity, April, 1895) the case of a woman in whom there was congenital absence of the uterus and ovaries—the absence being proven by an autopsy. The patient was in no way masculine; on the contrary she was attractively feminine. She suffered from recurrent insanity at which times she masturbated shamelessly. In her lucid intervals the possession of the sexual instinct was proven by confession that she had long had illicit coitus with her lover. She excused herself on the ground that the instinct was very strong and that her condition was such that she had no fear of pregnancy and that as she had been created differently from other women she was not subject to the same morality as others. The instincts which come to the race by transmission from generation to generation (especially those so fundamental and universal as the productive instinct), will not fail to appear in isolated cases where there is a congenital absence or a rudimentary development of the organs upon which the manifestation of the function depends. This fact explains the frequent failures of surgical procedures to cure abnormalities of the reproductive instinct. Of this an illustration is furnished by Dr. A. Laphorn Smith, Montreal, P. Q., who reports the case of a 24-year-old-unmarried woman who consulted him (*Medical Record*, Vol. 48) for a discharge which proved gonorrhœa. Her ovaries and tubes had been removed seven years previously on account of pain and enlargement. She consulted Dr. Smith a few months thereafter for troubles of the artificial menopause through which she passed successfully. He then lost sight of her until this time. Menstruation gradually decreased until the end of the year when it disappeared. She had no periods during six years. July, 1895, she had coitus, during which she became greatly excited, having an orgasm and straining herself, which she thought was the cause of her discharge. She never had so much sexual pleasure as at this time. In her opinion oophorectomy in no way alters voluptuousness. The cortical factor in volupty, so much ignored is well illustrated here.

NEURO-PHYSIOLOGY.

THE NERVOUS SYSTEM AND STOMACH SECRETION.—Lafayette Mendel, after a series of experiments, concludes an interesting article on this subject (*Dietetic and Hygienic Gazette*) as follows:

If the secretion of the gastric juice (under the conditions recorded) is a reflex act, the question arises, What are the paths of the nervous impulses to the stomach? Obviously, either the vagi or the sympathetic nerves may be concerned here. The older experiments intended to answer this question have led to no certain results; the bulk of the evidence has indicated that the gastric glands still secrete when they are cut off from the central nervous system. Pawlow and Schumowa Simanowskaja have again subjected the matter to experimental investigation. In dogs operated upon in the manner already described, section of the splanchnic nerves did not prevent the appearance of reflex secretion after "false" feeding of meat. Inasmuch as division of the vagi in the region of the neck causes so many undesirable results, these observers divided the nerves below the separation of the pulmonary and cardiac branches. The animals maintained a condition nearly normal for some time; but the "false" feeding by way of the mouth now failed to provoke secretion in the stomach. Heidenhain was unable to induce secretion by electrical stimulation of the nerves leading to the stomach; but in the investigation just recorded, a gradual increasing flow of gastric juice following a latent period was observed when the peripheral stump of the severed left vagus was stimulated with induction shocks. The secreted fluid had, in one instance an acidity of 0.37 per cent. and a digestive action on proteids. With the end of stimulation secretion was checked. Similar positive results are also recorded by other recent investigators after vagus stimulation in pigeons and frogs.

The evidence has been given upon which rests at present, the conclusion that the secretion of the gastric glands is influenced by the central nervous system in a manner analogous to the secretion of the saliva and pancreatic juice.

Such a conclusion does not exclude, by any means, other sources of stimulation. The coats of the stomach contain abundant nerve ganglia which may act as independent secretory centers; and furthermore, it is quite possible that secretion may also follow direct mechanical irritation of the secreting epithelium without the intervention of any nervous arrangement. Such an action would be analogous to that in insectivorous plants; in *Drosera*, for example the mere contact of an insect with the vegetable tissue suffices to call forth a secretion with distinct proteolytic power.

CLINICAL NEUROLOGY.

REFLEX CAUSES IN CHILDHOOD NEUROSES.—Dr. Rachford concludes (Neuroses of Childhood) that reflex causes are more frequent than in adults; such, for example, as uncorrected eye-strain, adherent prepuce, balinitis, etc. The nervous system of the child is more irritably unstable by reason of incomplete functional development. The inhibitory control of higher nerve centers on spinal reflex movement is feebly developed in the child. Blood changes are much more common allies of reflex disturbances in producing nervous disease in children than they are in adults. Reflex causes are very much more frequent in girls than in boys or in female adults. The approach of puberty with the functional development of ovaries and uterus is a source of constant reflex disturbance; after the full functional development of these organs the reflex excitation is intermittent and confined to a period just before and during the menstrual period. Inhibitory control of the spinal motor centers more readily gives way in young girls than in boys of the same age. The social conditions and habits of life of the young girl predispose her to nervous disease. Blood changes which produce nervous irritability are very much more common in girls than in boys.

CEREBRO-SPINAL MENINGITIS.—Dr. Scherer arrives (Medicine) at the following conclusions: The infection in epidemic meningitis may take place by way of the upper

air-passages. The mode of infection seems to be that the non-mobile diplococcus is taken up by leucocytes and thus carried through the lymph-spaces to the brain and its membranes. Demonstration of the diplococcus may be of value in arriving at a diagnosis in doubtful cases. The earlier the examination is made, the more are the chances of finding the organism. The observations have not been numerous enough to decide the persistence and duration of virulence of the diplococcus in the nose in these cases. The nasal secretion in cases of meningitis should be considered infectious and handled accordingly. In a similar way the presence of diplococcus of pneumonia and streptococci may be expected to be found in cases where the infection is through the inspired air.

SPINAL CONCUSSION.—Dr. R. O. Beard concludes (*N. W. Lancet*, July, 1895) that the term “spinal concussion” indicates a transient molecular disturbance of the cells of the cord. It is a misnomer as applied either to the actual sequelæ of such disturbance or to the many cases of nervous shock which, voluntarily or involuntarily, simulate railway spine. Actual concussion of the cord is not easily induced, and probably, only by a direct violence. No consensus of symptoms can be declared which can justly be denominated spinal concussion or railway spine. Lesions of the cord, resultant from this cause, vary with the intensity, quality and seat of the injury. They are sometimes vascular, sometimes meningeal, and sometimes involve the actual substance of the white fibre column or the gray matter of the cord. Although these lesions are not always discoverable, their motor, sensory, trophic or reflex results often prove their existence and demonstrate their location. Eliminating the cases of pseudo-concussion, to which I have referred, and those in whom slighter irritative symptoms develop, the remainder should receive a very guarded prognosis, which must be dependent upon the extent and gravity of their paralytic disorders. With the opinion, expressed by certain writers upon spinal concussion, that in all these graver cases neuroses preexist and are simply emphasized by the injury, there is no scientific ground for sympathy.

The argument is speculative and far-fetched. It savors very strongly of the special plea of the corporation counsel in surgery.

HYSTERIA DIAGNOSIS.—Dr. H. T. Patrick states that in diagnosis of hysteria (*Medicine*) certain anæsthesiæ are typical. First that in patches single or multiple, regular or irregular, without any relation to the distribution of the sensory nerves. These patches may be located anywhere on the body and may be difficult to find as their existence is frequently unknown to the patient. He cites a very puzzling case of hysterical blindness and pseudo-meningitis in which a careful prolonged search was necessary to determine a spot of anæsthesia over the second rib, at first no larger than a silver quarter but which once found, quickly led up to the correct diagnosis. There is the so-called stocking, glove or sleeve anæsthesia that is corresponding in distribution to the garment named and stopping short at a circular line about the extremity. This occurs in scarcely any other disease except multiple neuritis, and here in a modified form, the anæsthesia gradually decreasing from the extremity of the limb toward the trunk, and shading off into the normal. A hemianæsthesia which is limited sharply and exactly by the middle line, especially if it involve the special senses on the same side, is equally characteristic. Another distinctive trait of most, not all, hysterical anæsthesiæ, is that they do not interfere with cutaneous reflexes and automatic accomplishments. For instance, a woman with total anæsthesia of the hand will tie a bow beneath her chin with her usual dexterity; a man with complete anæsthesia of the buccal cavity will find no difficulty in the manipulation of the alimentary bolus. These acts would be impossible in organic anæsthesia.

A hysterical anæsthesia, too, is usually out of all proportion to the paralysis, whereas in organic affections just the reverse holds good, the motor functions suffering more than the sensory. A complete anæsthesia of the entire body in a patient still able to walk about is sure to be hysterical, as is also one which varies rapidly in distribution or degree. Along with anæsthesia, which it really is, may be men-

tioned the concentric contraction of the visual field with inversion of all the fields which are symmetrically contracted, and that for blue is as small as or smaller than, that for red, while for the normal eye it is distinctly larger. A striking peculiarity of this contraction of the visual field in hysteria is that, even when extreme, it does not cause the patient in moving about to collide with objects lying outside the field (but within the normal field)—that is, with objects *which he does not see*. An explanation of this apparent paradox cannot be entered into here. For accurate measurement of the fields, and for purposes of record a perimeter is necessary, but for quick estimation and bedside work the eye of the observer is generally sufficient. For this purpose he uses a small folding color-carrier (*N. Y. Med. Jour.*, April 27, 1895), which goes easily into the waistcoat pocket, and is thus always at hand when wanted. Another eye-symptom that is pathognomonic of hysteria is monocular amaurosis with binocular vision; that is, prisms, the apparatus of Flees, and other devices demonstrate that under certain conditions the patient does see with the blind eye. This hysterical amblyopia and amaurosis is frequently accompanied by anæsthesia of the eyelids and conjunctiva. A monocular diplopia or polyopia is hysterical, as is also micropsia or macropsia; these, like many other symptoms, may be unknown to the patient and must be sought for.

Loss of the pharyngeal reflex, tenderness to the left of the cervical spine, and of the ovarian region, and what Pitres has called haphalgesia, are important stigmata. The last is rare, and is an intense hyperæsthesia of touch for certain substances, as brass. In hysterical paralysis of an extremity, the various muscular groups are nearly equally affected; isolated paralyses, and hence paralytic deformities, as wrist-drop and talipes, are of the rarest occurrence. On the other hand, deformity due to contracture is frequent, but in these cases relaxing the affected muscles by position has no effect on the contracture. For instance, contracture of the fingers is not relaxed by forcible flexion of the wrist, as it is in organic disease. In accord with the foregoing is the fact that hysterical paralysis of the facial is one of the

greatest of rarities, while facial contracture, which may simulate it, is not very infrequent. In hysterical hemiplegia or paralysis of one lower extremity, there is not the "mowing gait," tipped pelvis and catching toe of organic disease; the paralyzed leg is dragged after the other or carefully pushed forward, and the foot set down flat. "Steppage" is unknown in hysteria. A paralysis for certain acts or manœuvres, and not for others, executed by the same muscles, is hysterical, as astasia-abasia, in which the power of the legs is good with the patient in the recumbent posture, but not when he tries to stand or walk. Rhythmic spasm is almost without exception hysterical. In hysterical convulsions the pupillary light reflex is not lost and the movements are purposive, that is, are palpably due to volitional impulse, and imitate more or less closely movements executed with a purpose, while in the convulsions of organic disease and of epilepsy there is reflex iridoplegia and the movements are incoordinate and often shock-like. In hysterical attacks, too, and immediately following them, there is a change in the ratio of the urinary phosphates, the ratio of the earthy to alkaline being as one to one instead of as one to three, the normal. Finally, the therapeutic test may quickly reveal the nature of the affection. Mental treatment, suggestion, hypnotism, electricity, may produce so sudden a change in the symptoms as to make the diagnosis ridiculously easy. He states that severe hysterical affection may occur in an individual who has never shown any other hysterical symptoms; that such an affection may remain unchanged for years, and be almost the sole sign of this omnivagrant disease. Further, that fever, a rapid or subnormal pulse, retention or incontinence of urine, loss of sexual power or desire, loss of pupillary reflex to light, and ankle clonus, although indicating as a rule organic disease, may occur as symptoms of hysteria. The "mowing gait" "steppage," etc., are found in certain spastic hysterics.

NAGGING WOMEN AND NERVOUS HUSBANDS.—The *Medical Standard* remarks that Dr. Edson some time ago stirred up self-appointed representatives of the "new woman" by his remarks on the production of nervous hus-

bands by nagging wives. The novelists devote much attention to the self-sacrifice of the wife to the hypochondriac husbands, but the reverse of the picture is too well-known to physicians. The hysterical nagging wife of the insane or neurasthenic husband is a familiar acquaintance. Such women are usually regarded as *fin-de-siècle* products. The Puritan matron, like her descendants, was often a hysteric. The 18th century statutes anent the use of the ducking-stool, which still survive in Delaware, demonstrate the recognition of nagging as an antisocial vice by the fathers of the republic. Yet the evils wrought by the nagging woman on her family are small compared to those produced by her sisters of the neurotic class who, as Dr. Des Champs points out, are women in whom an exaggerated sensibility exists but who are not sufficiently endowed with power to direct their will. They are divisible into three categories according to the predominance of one of three centers: cerebral, genital and spinal (motor or sensory). Thence result the three principal classes: cerebral, genital (or sensual) and neuropathic (sensory or motor).

These types may be pure or intermixed. The general characteristics are an absolute want of equilibrium in sensibility and will power. There exists a mobility of humor in direct relation with facial impressionability to external influences (external ideas or preceptions) or to internal states (intrinsic ideas). The nerves vibrate to all sentiments coming from within or without and are registered without proper relation. One fact chased by another is forgotten. Another produces a momentary hyperexcitation which takes the place of truth, whence it is that falsehood is instinctive, but the patient protests her good faith if accused of the same. This lack of equilibrium leads to decided modification of the mental faculties. Intellectual activity is overexcited, but in diverse degrees and variable ways according to the particular tendencies adopted. Absorbed by a preoccupation or controlled by an idea they become indifferent to all else. Their ideas are abundant and they rapidly pass from the idea to the act. Their vivid imagination coupled with a bright intelligence gives them a

seductive aspect, but their judgment is singularly limited, attenuated or false. They judge from a non-personal standpoint excellently. They are quick at discovering faults, even of their own relatives, but faults attributed to themselves are repudiated. Their memory is capricious. They forget their faults and their acts done under impulse, albeit these may be consciously done. The cerebral type is led by the intelligence. She ignores what passes in the sensorium commune. She has little or no coquetry; what there may be, is the result of intention and temporary. There is an ethical sense, frankness and nobility in her idea, disinterestedness and tact in her acts and she is capable of friendship. Her tastes carry her to male pursuits in which she succeeds. She becomes often what is called a "superior woman" and too often what is called an incomprehensible woman. She has but little guile. To the sensual type voluptuousness is the aim of life and the center of her acts and thoughts. She is well endowed with guile and extremely diplomatic. She is full of finesse but not very delicate; her lack of scruple spoils her tact. She is ruseful, dissimulating and unconsciously mendacious. She despises friendship and needs watching. If circumstances permit she loses all delicacy, reserve and modesty. She is destitute of scruples. Her crimes are coolly remorseless. The neuro-pathic type is one to which the grasshopper is a burden. Her nerves are always on edge. She is an heroic invalid who displays the air of a martyr about trivialities. The character of the neurotic recalls the observation of Milne Edwards concerning the monkey character. Levity is one of its salient features and its mobility is extreme. One can get it to shift in an instant from one mood or train of ideas to another. It is now plunged into black melancholy and in a moment may be vastly amused at some object presented to its attention. To these qualities it owes its teasing tendencies. Nagging would hence appear to be an expression of reversion.

HYSTERICAL HEART.—The heart in hysteria, according to J. T. Whittaker, (*Cincinnati Lancet Clinic*, June, 1895),

is distinguished by its easy excitability. The increase of action shows itself first after some emotional excitement or after stimulation by tea, coffee, alcohol, etc., and may amount to a genuine tachycardia though the frequency rarely reaches above 100 to 130 beats a minute. Retardation is much more rare, though reduction in the frequency of the pulse has been noticed in the so-called sleep attacks to 45 or even to 40 beats a minute. Real attacks of palpitation are rare, but the patient complains of the feeling of distress even though the action of the heart is so feeble as to be imperceptible. The pulse is increased after the slightest effort or psychical excitement. Sometimes the mere thought of effort suffices to excite the pulse. In the rarer cases of retardation the reduction of cardiac force may lead to syncope. Dr. Whittaker states that sleep attacks in hysteria often simulate apparent death. Hysterical angina is comparatively rare though much more frequent than real angina. The condition is recognized by the emotional disturbance which exists during the attack and which usually evokes an attack as well as by the absence of organic disease. Patients affected with hysterical angina express great mental distress. They wring the hands, throw themselves about and succeed in exciting everybody about them. The false angina is distinguished by a different situation of the pains, which do not always begin in the neighborhood of the heart but sometimes in the extremities or wander about in irregular ways. The attack is associated with other evidences of hysteria, as by emotional manifestations, eructations, polyuria, etc. Sometimes the attack may be produced by pressure upon tendon hysterogenic surfaces. Vaso-motor disturbances are frequent in hysteria. Alternating flushing and blanching of the face is very common. There are attacks of sudden coldness of the hands and feet which may shortly afterward become burning hot. There is often a sensation of numbness in the fingers and toes. Discolorations of hands, more especially of the fingers, have been frequently noticed. Sometimes the hands are white and the ends of the fingers and nails blue. In some rare cases the joints only are blue while the rest of the finger is red

so that the appearance is that of the blue rings with crimson borders. The spastic contractions may be so intense as to prevent the escape of blood after puncture. It has been noticed that cups withdrew less blood from hysterical than from healthy subjects. Landouzy records cases where the stroke of the finger nail or of a pencil would bring out a red line which might extend itself out to a broad red stripe. Sometimes there develops in the middle of the stripe a pale red lashlike elevation so that curious lines can be traced upon the skin in the condition distinguished as autographism. This condition has been observed also in epilepsy where it does not, however, persist so long. Hysterical autographism may last for years. In this connection belongs also the condition of vicarious menstruation with bleeding from the nose, mouth, ear, stomach, etc. Great difficulty in diagnosis often arises in this connection as hæmoptysis and hæmatemesis are especially frequent in young anæmic woman. The profession is more willing to accept a vicarious hæmorrhage from the nose as epistaxis than as relief of surcharged vessels in congestions about the head. Studies of blood changes which occur in connection with menstruation, entirely independent of the refinement of the so-called Stevenson wave, account for the escape of blood from dilated parietic vessels in unsupported places. While most cases of hæmorrhage from the lung are due to manifest or latent tuberculosis there is no doubt that true hæmoptysis results from suppressed menstruation. In this connection comes up stigmatization as Dr. Harriet C. B. Alexander (*Medical Standard*, Feb., 1895) points out. Many of these cases are due, as Dr. Alexander and Dr. Coomes (*Medical Standard*, Vol. XII) have shown, to suggestion. Facachon and Alexander were able by suggestion to raise vesicles like those of blisters on the skin. Jendrassik and Kraft-Ebing produced eschars, and Bouren, Burot, Mabile, Ross and others induced hæmorrhages. It is therefore not so surprising that certain hysterical patients who have concentrated their minds continuously upon the wounds of Christ should be able to induce hæmorrhages in these regions, especially when, as was observed in the case

of Louise Lateau by Boens, the hæmorrhages could be produced by rubbing.

Hysterical affection of the lungs themselves is much more infrequent, but nervous disturbances in the larynx are among the most common expressions of the disease. Paroxysms of sneezing have been frequently recorded. So-called nervous cough is a great embarrassment in differential diagnosis. It is usually dry, unattended with expectoration and has a peculiar bellowing character distinguished as the "sheep cough." It distinguishes itself by its excessive obstinacy. It often appears suddenly and as suddenly disappears under the influence of emotional excitement and the worst paroxysms can be controlled for the time by diversion of the mind. Severity of the cough eventually produces pain in the chest and it may produce hæmoptysis. Certain hysterical persons learn to draw blood from the mouth, gums, etc., sufficient to tinge the sputum. Dr. Whittaker reports the case of an hysterical patient who expectorated one entire day a blue sputum. Instruction was given in the presence of the patient to have the next fresh sputum examined chemically and microscopically. This put an end to the discharge. Aphonia is one of the most common manifestations of hysteria usually in the form of adductor paralysis. The laryngoscope shows that the vocal cords are not approximated in phonation though the glottis is closed in cough. The patients at times are unable to speak but can still sing or express pain.

Hysterical aphonia usually disappears. Many cases remain aphonic for years. Where the voice is suddenly restored by artificial means as by electricity, faith cures, miraculous interventions, etc., the cure, as a rule, is not permanent but returns when the patient gets away from the impression. Lowenfeld relates the case of a patient whose voice had been reduced to a whisper for years. She was induced to repeat the letters of the alphabet, at first in a low tone and louder and louder without notice having been attracted to the voice. When the patient found that she could articulate the letters distinctly she began to speak. The patient was convinced that she was not able to speak

and made no effort to speak. The trial showed the ability without any reference to the will. Martins reported a case of hysterical aphonia in a servant in which diagnosis was established by the laryngoscope. The physician assured the patient that she would be able to utter a loud sound the moment he made pressure on the larynx. Under pressure the patient spoke with a loud, distinct voice. After repeated experiments of the same kind he told her she would be able to speak as long as she held her hand at the larynx. This experiment also succeeded perfectly. As soon as she took away her hand she was unable to speak. This condition lasted for weeks as long as the patient was under observation. The diagnosis of hysteria as the base upon which symptoms are built is not a matter of the recognition of a disease, but of distinguishing an individual symptom whether this or that symptom is of hysterical origin or nature. The most essential thing in excluding hysteria is the recognition of the symptoms of organic disease. Most organic diseases have symptoms which hysteria may imitate, but they have also symptoms which hysteria cannot imitate. Thus hysteria may imitate tuberculosis. But hysteria cannot present the expectoration, the bacilli in the expectoration and the physical signs of disease. While hysteria may imitate disease at the start, it may be easily eliminated in the future course of the malady. Hysteria may present at the start the symptoms of an organic disease, myocarditic valve lesions, etc., but the conditions are easily separated later. Then certain symptoms belong more definitely to hysteria, such as the paroxysmal attacks, the emotional dreams, sensory hemianæsthesia, certain hyperæsthesias, the globus hystericus, etc. These things mark hysteria. In all cases it must be remembered that hysteria is a real disease of the brain cortex.

EYE SYMPTOMS OF ACROMEGALY.—Dr. Ernest Hertel, of Berlin, states that among these are (Phila. Polyclinic) thickening of the cartilage and skin of the lids by increase of the lowest layer of the true skin and its connective tissue, hypertrophy of the glands of the skin, pigment spots, abnormal prominence of the orbital edges and apparent

sinking of the ball and, on the other hand, occasionally intense exophthalmus and even luxation of the globe and increase of the intraorbital contents; hyperplasia of all periphery nerves, the connective tissue surrounding them being thickened and sclerosed or softened and degenerated, perforated by vessels with thickened walls and diminished calibre; neuralgic pains in the head, and eye ball extremities, increased lachrymation, nystagmus of the third nerve, but never of the sixth or spinal, sluggish pupil generally dilated, diminution of vision, temporal hemianopsia, enlargement of the pituitary body, especially its anterior section. Cases occur where the lesion is supposed to be a growth of the wings of the sphenoid and narrowing of the optic foramina and pressure on the nerves. Occasionally there is choked disk which is explained by the growth of the pituitary gland or by the presence of another tumor. Treatment can be only symptomatic.

THE ULNAR SYMPTOM IN GENERAL PARALYSIS.—Recently at a meeting of the Berlin Psychiatric Society, Boedeker and Falkenberg (*Neurol. Centralbl.*) gave the results of their researches on this subject. According to Cramer, in 75 per cent of general paralytics the trunk of the ulnar nerve is not painful on pressure, while in most cases of other forms of insanity compression of the nerve as it lies between the olecranon and the inner condyle produces sharp pain and reaction. The authors examined 100 male and 25 female paralytics, and 300 non-paralytic insane persons. In 58 per cent. of the paralytics the ulnar nerve was analgesic; in 35 per cent. pressure caused pain; in 7 per cent. the result was doubtful. Of the non-paralytics, 39 per cent. showed ulnar analgesia; the remainder exhibited no such defect. The authors remarked on the fallacies apt to arise from the subjective element, and they concluded that analgesia of the ulnar trunk is of little value in the diagnosis of general paralysis. They found the ulnar symptom in 74 per cent. of 31 paralytics who exhibited loss of knee-jerk. At the same meeting Mendel stated that he not infrequently had observed analgesia of the legs to be an early symptom of

general paralysis in cases where knee-jerk was present and no other evidence of tabes existed.— *St. Louis Medical and Surgical Journal*.

AN EARLY SIGN OF TABES.— Dr. James J. Putnam (Boston Med. and Surg. Jour.) considers the flexing of the leg at the hip without bending it at the knee, so far that it will almost touch the ear, without exciting the painful sense of popliteal tension which is so speedily felt by a person in health, an important sign in the early stage of tabes. Though not invariably present, Dr. Putnam thinks it deserves study.

HYSTERICAL RAYNAUD'S DISEASE.— In the *Alienist and Neurologist*, about a decade ago, Dr. J. G. Kiernan called attention to the existence of Raynaud's Disease in various psychoses inclusive of hysteria. His results have been corroborated by Levi who concludes (Arch de Neur I, 1895) that there is a certain form of Raynaud's Disease which is purely hysterical. It may be born of, and reappear from, a powerful emotion; and by transformation of this emotion into a subconscious imperative conception the disease becomes established as an entity. Acute articular rheumatism is frequently found to have preceded and to serve as a localizing cause for hysterical manifestations. The onset is sudden and of psychic, emotional origin, with renal disturbance—anuria or polyuria. Gangrene is probably possible in this affection. The examples of Raynaud's disease of hysterical or emotional origin are numerous, and may occur in several members of the same family. For the treatment and etiological diagnosis, it is necessary to uncover the psychologic history of the patient. Hypnosis permits us to discover the immediate cause of the affection and to cure or relieve it.

IS THE PHYSIOGNOMY OF THE FUNDUS OCULI IN EPILEPSY CHARACTERISTIC?—Dr. Wendell Reber, answers the question as follows:

A well-defined generally accepted conclusion as to the physiognomy and import of the epileptic fundus oculi is not yet possible. It can only be obtained by a summary of the

results of accurate observations carried on and recorded by various investigators.

It is with this conviction that the writer records his own experience, gleaned from one years' ophthalmoscopic study on epileptics at the State Hospital for the Insane at Norristown, Pa., during his residence at that institution. In this study the following precautions were observed:

1. Only selected cases of non-focal epilepsy were admitted to the study.

2. Subjects were chosen whose eyes were free from extraneous diseases. Inflammatory or traumatic eyes were omitted so as to obtain, as nearly as possible, representative peripheral organs.

3. Males were taken. These were chosen to avoid any conflicting findings that might be the result of special feminine characteristics.

4. No subject was examined within less than 24 hours after a convulsive seizure. These observations therefore belong to the interparoxymal period of epilepsy and were intentionally made at that time, for it is during that period that the patient is generally seen by the practitioner.

5. All ophthalmoscopic observations were made under a mydriatic. This was done with particular reference to the macular region, the careful study of which is hardly feasible with a mobile iris.

6. Every subject was submitted to the same routine examination under the same conditions, thus obviating any seeming gross changes that might arise from differences in the method of study. As Oliver says: "The reasons for such rules are obvious, as by their observance all faults in working and want of precision in method are reduced to a minimum, and the conclusions, which are the very essence of the work, are thus rendered more valuable and less liable to gross and deceptive error."

Out of this study, conducted in the specified manner, grow the following observations:

First. In a number of cases the optic disc was superficially overcapillary, and in its deeper layers greyish and sometimes grey.

Second. In quite a number of instances the scleral ring was sharply cut, especially to the temporal side.

Third. In many instances the retinal lymph channels were distended and visible as glistening milky white opacities, occasionally along the vessels, but most frequently at the vessel entrance on the disc.

Fourth. In a goodly number of cases the fiber layer of the retina was seen much thickened, this condition being most pronounced superiorly and inferiorly.

Fifth. In a number of other instances the arteries were found a little wavy.

Sixth. In several instances the vessels on the optic disc surface were quite tortuous.

Seventh. In several cases the veins showed tortuosity.

Eighth. In a few instances pulsating veins were noticed.

Ninth. In a very few instances the macular arterial twigs were tortuous.

Tenth. In a few instances the choroid in the macular region was granular. Particular notice was given to this last feature, as it was considered of some importance. Frequently it happened that conditions at first strongly suggestive of granular choroiditis disappeared under accurate focusing with the ophthalmoscope.

If we were to attempt now to draw a type picture of the background of the eye of an epileptic, it would be about as follows;

1. A superficially over-capillary optic disc showing grey-ness in its deeper portions.

2. A scleral ring, sharp cut temporally.

3. Increased thickness of the retinal fiber layer more marked at the superior and inferior margins of the nerve head.

4. Distension with opacity of the retinal lymph sheaths, more especially on the optic disc surface.

However, this group of ophthalmoscopic findings does not differ from that which the writer has frequently observed in low-grade neuro-retinitis consequent upon eye-strain. In this connection he wishes to remark that the

great majority of epileptics included in the above study exhibited hyperopia or hyperopic astigmatism in amounts ranging from 1.00 to 4.00 diopters, the average being 1.47 D.

A very few were practically emmetropic and a few more myopic in slight degree. It may be, as Gowers claims, that the neuro-retinal conditions of the epileptic fundus oculi are explicable by the ocular conditions. At any rate, in casting about for causative factors the ocular conditions are well worth weighing.

The author has no conclusions to offer. He feels that until the above study has been supplemented by extended work among epileptics he is not justified in putting forth positive statements.

However, in concluding, he wishes to contend that in the present state of ophthalmic science, the claim that the background of the epileptic eye is the visible peripheral expression of correlated changes in the cerebral cortex, must be accepted with reservation.

PARTIAL NEURASTHENIA.—Dr. H. M. Bannister in a recent Editorial (*Journal American Medical Association*, Sept. 28, 1895.) remarks:

The discoveries in the finer structure of the nervous system, the resulting modifications in our views as regards its physiology, the recognition of the fact that nerve action is in the centers affected, not by continuity of the nerve cell and fiber, but by their contiguity, have revolutionized our ideas as to the pathology of a large number of disorders of which the anatomic lesions have so far evaded us. Adding to this, the discovery by Hodge, of the effects of fatigue upon the nerve cell itself, a rational pathology suggested for nearly all the so-called functional disorders of the nerve centers, neurasthenia and insanity included. This fact largely recognized by the most recent authors on nervous diseases, which in this respect is in advance of all its predecessors. While to a large extent this pathology is, and must be only theoretical, it is a decided gain over our former agnostic condition in this regard. It is an advance to have a rational theory, and the possibilities in this direction are hereby infinitely increased. Taken in connection with the

researches now being made upon the effects of various toxic agencies upon the neuron, these discoveries enable one to give a reasonable and possible explanation for almost or quite every general "functional" disorder of the nervous system. With the theory of cortical localization carried a little beyond our actual acquisition of facts, we have also an explanation, by these discoveries, of the partial neurasthenias, the special dyskinesias, etc., which has been hitherto lacking. Writer's cramp, for example, and the other occupation neuroses, together with much of the special disorder sometimes attributed to eye strain may, perhaps, be better accounted for by assuming a fatigue and derangement of the nerves of special functional centers, sometimes even without any extensive implication or participation of other nerve elements. The more complex and specialized the function disordered, the more rational can this explanation be made to appear. For example, Bianchi has recently described a new type of partial neurasthenia (anagnosiasthenia) in which distress is experienced from every attempt at reading, while general health, intellection and the use of the eyes for other purposes may be altogether uninterfered with. This condition may reach absolute disability as far as reading is concerned, without any impairment of efficiency in other directions. The cerebral mechanisms involved in the act of reading are infinitely more complex than the peripheral, and it is as easy to suppose that their fatigue or insufficient reparative power may induce neuralgic discomforts in this case as in writer's cramp, where a peripheral pathology has never been extensively accepted, and in which we must therefore attribute a purely central origin to the pain. Other professional neuroses than writer's cramp readily fall under the same law, and as much can probably be said of the other partial neurasthenias, the disabilities for mental or physical exertion which may exist separately, and many others that are possible and undoubtedly sometimes occur. They all find their best explanation in the fatigue and more or less permanent exhaustion of the neuron, of which the associated anatomic condition has now become known.

The last assertion is too strongly put. Furthermore, the whole "new" pathology is simply newly phrasing the recognition of the biochemical principle underlying functional disorders which had been made by Spitzka and other American neurologists.

EDITORIAL.

[*All Unsigned Editorials are Written by the Editor.*]

The Recent Medico-Legal Congress held in New York was a most complete success. The impetus given by it to the advance of Medical Jurisprudence can not yet be estimated, but it has been very great. The action of the Public Press in aiding and furthering its labors has been phenomenal and never before approached in any scientific endeavor in this country. Should the Legal, Medical and Scientific Press take it up in the same friendly spirit it would mark the labors of the Congress just closed as an epoch in the development of Forensic Medicine upon the American Continent. The papers numbered about sixty. These with the interesting discussions, will make a very valuable and entertaining volume for students of Psychiatry, especially in relation to law. An appeal is now made by the officers chosen at the congress to the entire membership of the Medico-Legal Society to publish this volume. The officers of the congress have decided to make an appeal to the members by request on each to make a small contribution to enable the work to be completed. The subscriptions not to exceed \$10.

We take pleasure in calling attention to this subject and believe the interest of both Law and Medicine will be greatly promoted by advancing the objects of the Medico-Legal Society.

The Fifth Annual Meeting of the American Electro-Therapeutic Association was held in Toronto, Canada, on Tuesday, Wednesday and Thursday, Sept. 3rd, 4th and 5th, 1895, Dr. A. Laphorn Smith, of Montreal, presiding. The attendance was good and program full. Among the social features was a trolley party by the President of the Toronto Street Railway, a reception at the Toronto Athletic Club and a visit to the Toronto Exposition. The following officers were elected for the year 1895-1896, viz: President, Dr. Robert Newman, of New York City; Vice-Presidents, Dr. Halford Walker, of Toronto,

Canada, Dr. D. B. D. Bearer, of Reading, Pa; Treasurer, Dr. R. J. Nunn, of Savannah, Ga; Secretary, Dr. Emil Heuel, of New York City; Executive Council, Drs. W. J. Morton, of New York City, G. Betton Massey, of Philadelphia, Pa., W. J. Herdman, of Ann Arbor, Mich., Emil Heuel, of New York City, Wendell C. Phillips, of New York City. The next meeting will be held in Boston, in September, 1896.

A Clergyman's Psychological Reflex. The Ram's Horn, which hits some hardicks at "folly as it flies," both in the Christian Church and among the agnostic and the heathen, relates the following humero-pathetic leave-taking speech of a country parson, on going away from his flock to a new field of spiritual labor which is clearly the psychical reflex of his congregations parsimonious appreciation.

"Brothers and sisters, I come to say good-by. I don't think God loves this church, because none of you ever die. I don't think you love each other, because I never marry any of you. I don't think you love me, because you have not paid my salary; your donations are mouldy fruit and wormy apples; and 'by their fruit ye shall know them.' Brothers, I am going away to a better place. I have been called to be chaplain of a penitentiary. Where I go ye cannot come, but I go to prepare a place for you, and may the Lord have mercy on your souls. Good-by."

The American Engineer.—After Nov. 1st, this journal will be published bi-weekly, and will appear every alternate Thursday. Each number will contain one-half as much reading matter as is now given in the monthly issue. The price, per number, will be reduced to 10 cents, and the annual subscription to subscribers in this country, Canada and Mexico to \$2.50. Owing to the additional postage, the rate to foreign subscribers will remain \$3.50. Some changes, which it is hoped will be improvements, in the scope and character of the paper will be made, and will be announced later.

The American Academy of Railroad Surgeons.
—A successful meeting of this Association was held in Chicago, Sept. 25th, 26th and 27th. The following officers were elected: President, Dr. J. E. Owen, Chicago; Vice-Presidents, Dr. L. E. Lemen, Denver, and F. H. Peck, Utica; Secretary, Dr. Webb J. Kelly, Galion, O; Treasurer, Dr. C. B. Killer, Corry, Pa. The next meeting will be held at Chicago in September, 1896.

Vin Mariani and the Dispensary Law.—Gov. Evans, of South Carolina, has exempted Vin Mariani from

seizure in the State of South Carolina when not sold as a beverage. This is a special concession to a well known medicine.

Facts about St. Louis.—Besides her six regular Medical Colleges for men and one for women, her large and numerous hospitals, her thirteen parks, her great universities, and immense mercantile and manufacturing establishments, and far-famed hosteleries, St. Louis in some things excels all other cities. For example, she has the deepest artesian well in the world, the largest railroad station, hardware house, drug house, woodenware house, tobacco factories, lead works, brick yards, stove and range factories.

As compared with the United States, St. Louis has the largest brewery, shoe factory, saddlery market, street car factories, hardwood lumber market, shoe output, agricultural implement house, finest street cars and botanical garden.

St. Louis is the second largest shoe distributing point in America, and the third largest dry goods, clothing, and grocery market. It has 275 miles of electric street railroad. It was the first city to run electric mail cars, to sprinkle its streets by municipal contract, and to light its streets and alleys uniformly by electricity. It is the only city in the world which has held eleven consecutive, annual, self-supporting Expositions.

The assessed valuation in 1860 was \$57,537,415; in 1880 was \$160,493,000; in 1895 is \$326,463,600.

Value of manufactured product, 1860, \$27,000,000; 1880, \$114,333,375; 1894, \$285,000,000.

Street railway passengers carried, 1885, 41,000,000; 1894, 98,000,000.

We have never seen in our travels in the United States or in the old world a station building to equal that of St. Louis, either in substantial construction, architectural appearance, artistic internal finish or completeness of detail in construction for the comfort of the travelling public. Here is a description somewhat in detail:

It covers an average of upwards of eleven acres, and has in its sheds four miles of tracks. It is equipped with a grand main waiting room covering nearly nine thousand feet of space, with other waiting rooms almost equally as large. Connected with it is a hotel with a hundred rooms; and it is so constructed and arranged that no locomotive ever enters the sheds, hence there is a total absence of smoke and soot.

DIMENSIONS.

Dimensions of station proper, 120x606 ft.; dimensions of train sheds, 700x606 ft. Total dimensions, 820x606 feet. Giving a grand area of 496,920 square feet, 11 acres.

Area of grand main Waiting Room, main floor, 8,806 sq. ft.; Ladies' Waiting Rooms, main floor 9,362 sq. ft.; Gentlemen's Waiting Rooms, main floor, 5,187 sq. ft.; Dining Room, main floor, 4,800 sq. ft.; General Concourse, on ground or track floor, 8,891 sq. ft.; Carriage Concourse, on ground or track floor, 6,716 sq. ft.; Emigrants' Waiting Room, on ground or track floor, 3,132 sq. ft.; Lunch Room, on ground or track floor, 3,725 sq. ft.; Main Ticket Office, on ground or track floor, 2,004 sq. ft.

Height of Station, four stories and basement.

Height of Main Waiting Room, 80 feet.

Height of Tower, 250 ft. from base to summit.

Hotel 100 rooms.

Dimensions of Baggage Room, 33x300 ft., two stories.

Material used in construction—Station proper, outer walls, gray Bedford limestone; inner walls, brick; beams and arches, steel; train sheds, iron and glass; roof, Spanish tiles.

Number of tracks covered by sheds, 30. Total length of tracks, 21,000 ft., or nearly 4 miles.

Add to the above the great daily newspapers and evening dailies, the Globe, the Republic, the Post, the Star Sayings, the Chronicle, Anzeiger, Westliche Post, her numerous religious, scientific, library and medical periodicals, among the latter the ALIENIST AND NEUROLOGIST, and you have an outline of the great and growing city of our six hundred thousand people, destined before the close of the century to have a population of more than one million of as good, enterprising and intellegent a people as speak the English language.

Eugene Field's Medical Advisers have evidently "got onto" the fact that dyspepsia is largely a condition of the nervous system as revealed in the following lines to the pneumogastric nerve.

Eugene Field's Poem on the Pneumogastric Nerve:

Upon an average twice a week,
When anguish clouds my brow,
My good physician friend I seek,
To known "what ails me now."
He taps me on the back and chest,
And scans my tongue for bile,
And lays an ear against my breast

And listens there awhile.
 Then he is ready to admit
 That all he can observe
 Is something wrong inside, to-wit:
 My pneumogastric nerve!

Now when these Latin names within
 Dyspeptic hulks like mine
 Go wrong, a fellow should begin
 To draw what's called the line,
 It seems, however, that this same
 Which in my hulk abounds,
 Is not despite its awful name,
 So fatal as it sounds:
 Yet of all torments known to me,
 I'll say without reserve.
 There is no torment like to thee,
 Thou pneumogastric nerve.

This subtle, envious nerve appears
 To be a patient foe—
 It waited nearly forty years
 Its chance to lay me low:
 Then like some withering blast of hell
 It struck this guileless bard,
 And in that evil hour I fell
 Prodigious far and hard.
 Alas! what things I dearly love—
 Pies, puddings and preserves—
 Are sure to rouse the vengeance of
 All pneumogastric nerves.

Oh, that I could remodel man!
 I'd end these cruel pains
 By hitting on a different plan
 From that which now obtains.
 The stomach, greatly amplified,
 Anon should occupy
 The all of that domain inside
 Where heart and lungs now lie.
 But, first of all, I should dispose
 That diabolic curve
 And author of my thousand woes,
 The pneumogastric nerve!

Apepsia and dyspepsia nervosa are becoming better understood than formerly even by the laity.

American Orthopedic Association.—The ninth annual meeting of this association was held at Chicago, Sept. 17, 18 and 19, Dr. John Ridlon presiding.

The attendance was good and many valuable papers were read.

The meetings by the courtesy of Mr. H. J. Furber; were held in the Columbia Memorial Building.

Dr. F. S. Coolidge received the members and guests of

the Association at his residence, 2636 Prairie avenue, on Tuesday evening from eight to eleven o'clock.

The association took a look at the Drainage Canal. The members were also guests of the Chicago Orthopedic Society, which gave them a luncheon at Lincoln Park Beach, and a drive on the north shore.

The following officers were elected: President, Dr. Royal Whitman, of New York; first Vice-President, Dr George W. Ryan, of Cincinnati; second Vice-President, Dr. Joel E. Goldthwait, of Boston; Secretary, Dr. John Ridlon, of Chicago; Treasurer, Dr. E. G. Brackett, of Boston.

The next meeting will be held at Buffalo in the third week of May, 1896.

The Barnes Medical College.—This institution has just finished a most successful session, the third of its existence. Its growth has been phenomenal beyond all the dreams of its promoters. It now stands eleventh in number of its students in the United States. Those who have a larger number are institutions of many years standing. The Barnes graduating class numbered 64, all bright men. The general average of this class in their examinations was over 80 per cent. The college challenges emulation in this regard. The institution is about to erect a new building. They have outgrown their present quarters and must increase their accommodations. The cut which appears in this number of our journal represents the exterior. It speaks for itself. The building will be about a hundred feet square, and situated on the corner of Thirtieth and Chestnut streets, in the west end of the city, a beautiful location, with the most pleasant of associations. As for the interior, the board of trustees and faculty will spare neither skill, pains or money to make it all that it should be, the best in the country.—Abstracted from editorial in *Medical Era*.

The American Public Health Association held its twenty-third annual meeting at Denver, October 1 to 4. The following officers were elected for the ensuing year: —Dr. Eduardo Liceaga, of City of Mexico, President; Col. A. A. Woodhull, U. S. A., first Vice-President; Dr. F. Sewall, of Denver, second Vice-President; Dr. Irving Watson, of Concord, re-elected Secretary; Dr. Henry Holton, of Brattleboro, Vt., Treasurer. Executive Committee; Drs. J. C. Schrader, of Iowa city, Iowa; R. S. Goodwin, of Thomaston, Conn; J. L. McShane, of Baltimore, Md. Buffalo, N. Y. was selected as the next place of meeting.

Rest and Exercise in the Treatment of Nervous and Mental Diseases.—At the July, 1895, meeting of the British Medico-Psychological Association, a most interesting discussion of this important subject came about through the able papers of Doctors T. S. Clouston and J. Batty Tuke, in which the other psychiatric giants of this association of big statured alienists generally participated: Raynor, Blandford, Rivers, Cooke, Yellowlees, Drapes, Andriezen, Urquart. Savage, Conolly Norman, G. M. Robertson and Nicolson were the speakers.

The consensus of opinion was that a judicious regulation of moderate exercise and ample rest gave the best neuro- and psycho-therapy in neuriatric and psychiatric disorder, especially in melancholia and in the hyperæmic forms of insanity.

Thê Antiquity of the Antitoxin Idea.—Our esteemed contemporary, *The Atlantic Medical Weekly*, refers to the fact that Pliny says that Mithridates, King of Pontus, made himself proof against poisons by gradually accustoming himself to all poisons, by taking a mixture, the principal ingredient of which was the blood of the Pontic duck which was said to live on poisons, thus confirming anew the old observation of Solomon that "there is nothing new under the sun."

British Medical Association.—The sixty-third annual meeting of this Association was held in London, July 30 and 31, and August 1 and 2, 1895. The attendance was greater, perhaps, than at any previous meeting. The President's address was delivered by Sir J. Russell Reynolds.

Psychological Section, B. M. A.—The section on Psychology of the British Medical Association met in the Examination Hall, Victoria Embankment, the president of the section, W. Julius Mickle, M. D., delivering an address on "Abnormal Brain Convolutions." The following discussions contributed further to the scientific program:

"The Treatment of Melancholia," introduced by Dr. Rayner; "Insanity in relation to Criminal Responsibility," introduced by Dr. Maudsley, and "Epilepsy and its relation to Insanity," introduced by Dr. Gowers.

The remarks of the three principal speakers were enthusiastically received. The following papers concluded the interesting program:

"The Relation of Diabetes to Insanity," Dr. C. H. Bond; "Mental Symptoms in Relation to Bodily Diseases in the Sane," Dr. H. Head; "Mental Symptoms in Relation to Exophthalmic Goitre," Dr. A. Maude; "Mental

Symptoms of Bodily Diseases," Dr. E. S. Reynolds; "A Comparison of the Breaking-Strain of Ribs in the Sane and Insane," Dr. A. W. Campbell; "Voluntary Boarders in Asylums," Dr. Percy Smith; "Insanity in Conduct," Dr. G. H. Savage; "Operative Treatment of Idiocy," Dr. Shuttleworth; "The Law in Relation to Single Patients," Dr. L. A. Weatherly.

The classical and philosophical diction of Maudsley, the didactic erudition of Raynor, the skillful clinical differentiations of Gowers and the anatomico-psychiatric brilliancy of Mickle,—all shone with conspicuous brilliancy at this meeting, and the whole program was of such an entertaining and instructive character as to well repay all who attended, and reflect credit on this great and growing department of this great and growing assemblage, an association which is as much the pride of the medical world as it is of the medical profession of Great Britain.

The Japanese, in addition to their many advances in modern thought and action, have added to their growing renown something of decided value to the chemico-therapy of digestion in Taka Diastase, the product of the original laboratory research of Jokiki Takamine, detailed in a late number of the *London Lancet* and promptly offered to the medical profession by the always enterprising firm of Parke, Davis & Co. This great establishment is continually reaching out for the useful and good preparations and placing the profession under renewed obligations for some new therapeutic resource. Like all the other firms of like character, whose advertisements may be found in our pages, they resemble the "unstrained" quality of mercy which, "blesseth him that gives and him that takes." We speak this commendation of Parke, Davis & Co. and their valuable Taka Diastase from personal experience and practical observation. The same may be said of all similar preparations of Fairchild Brothers & Foster, whose valuable pepsine and pancreatic preparations have stood the test of thousands of thorough trials. In fact every preparation of whatever house that finds place in our pages is worthy of professional confidence, such as Gardner's hypophosphites, Lambert's Listerine, Peacock's Bromides, Battles' Bromidia, Panopeptone, Antikamnia, Syrup Hematic Hypophosphites, Pasteurine, Melachol, Mercauro, Vin Mariani, Antitoxine and Maltine with Coca Wine. Our advertisers are so well able to speak for themselves and do it so thoroughly well that we seldom think of commending them. Nevertheless, we can cordially commend them all.

Are you a Broad Guaged and Cultured Physician, and do you aspire to be something more than a mere prescriber of drugs in the practice of your profession? If so, you should read the ALIENIST AND NEUROLOGIST regularly. It should have a preferred space on your office table and library shelf for frequent reference. It deals with current and advanced questions in neurology and neuriatry, psychology and psychiatry, and the world's best and most eminent writers in psychological and neurological medicine contribute to its pages.

If you wish to be abreast of advanced medical thought, research and resource, you cannot ignore this well-known, high grade medical and medico-legal periodical. If you are a physician in general practice, you need it. If you are a broad minded physician in any of the specialties, you need it.

If you wish to make a creditable appearance in court on any subject where the mind or nervous system are primarily or secondarily involved, you need it. If you aspire to be an eminent and most useful divine by giving your flock or your pulpit the benefit of a broad and correct knowledge of the human mind as influenced by and influencing environment in its healthy or morbid states of the soul, it will greatly aid you to comprehend some of the grand problems in psychology with which you have to deal.

If you are a lawyer, having probate or criminal practice, you have especial need for it. If you are a gentleman of leisure or a literateur and wish to possess the highest culture and to understand fully the laws and peculiarities of mental display, you cannot well dispense with the ALIENIST AND NEUROLOGIST.

Any man who reads the ALIENIST AND NEUROLOGIST, physician, jurist, lawyer, doctor of Divinity, literary scholar, or gentleman of cultured leisure, will be better in each of these respective walks in life from reading it, and would be handicapped among men of the highest intelligence without it.

The Standard Dictionary.—As English comment is just now particularly severe on many things American, it is gratifying to see how unqualified is its continued praise of the "Standard Dictionary." This is all the more remarkable in view of the natural sensitiveness on the part of England at being obliged to look elsewhere for a dictionary of its own language.

The *St. James's Budget*, the weekly edition of the *St. James's Gazette*, London, one of the most conservative and authoritative of English journals, in its issue of July 27th,

ends its review of the Funk & Wagnalls Standard Dictionary, as follows:

"Nothing can be more complete than this, nothing more exhaustive..... The excellencies of this book are so bewildering that whatever might be said of them there would be as much remaining to be said. To say that it is perfect in form and scope is not extravagance of praise, and to say that it is the most valuable Dictionary of the English language is but to repeat the obvious. The Standard Dictionary should be the pride of literary America, as it is the admiration of literary England."

The *Leeds Mercury* in a review just published, also says:

"We have no hesitation in stating that the Funk & Wagnalls Standard Dictionary is the best and most complete Dictionary of the English Language now in existence."

John Bull can be generously fair when he tries to be, but he cannot help but show just a little natural sensitiveness at being constrained to look elsewhere for a Dictionary of his own language: "Strange," the *London Literary World* exclaims in speaking of the Standard Dictionary, "that the Queen's English should find its chief autocrats in the country of the President."

Mobile Pupils in Epilepsy.—Close observers of epileptic attacks have noted the alternate dilation and contraction of the pupils after an epileptic seizure. This is generally observed in seizures of *epilepsia gravior*, and often in the transitory attacks of *epilepsia mitior*. The iris alternately dilates and contracts in the seizure and continues to do so for awhile after consciousness is returning or returned.

This oscillating pupil is of value in the differential diagnosis of Grand mal from Apoplexia, of Petit mal from Syncope, of true from feigned and of Hystero-Epilepsia from the simulated unconsciousness of hysteria, of epileptic paroxysmal mania and feigned epileptic mania, or epileptic paranoia in later medico-forensic parlance, especially when the maniacal paroxysm is known to have been preceded by a period of stupor, and glazing or fixedly staring expression. To our old and much esteemed friend, M. Gonzales Echeverria, the profession is first indebted for first having called attention to this subject at least in America, at any rate it was he who first called our attention to this diagnostic pupillary phenomenon, when on a visit to his hospital in New York, in 1867. No man better understood epilepsy in the days of his prime than this early American Neurologist. This symptom should be called Echeverria's

epileptic pupil, though a continued vacillating pupil is not diagnostic.

There is a peculiarity about the pupil, which must be often watched and long studied to be fully appreciated. It is like the swell of the sea after a violent storm. It is the remaining evidence of a nerve storm in the brain, after the wind and lightning of cerebral perturbation has passed away. The discharges have ceased and the normal calm over the cortex has come again.

Then and Now.—A few years ago, Baldy (*Philadelphia Medical News*, May 16, 1891,) said: "that pretty much all the so-called uterine diseases are not diseases of the uterus at all, but of the appendages;" that, "on the whole, it had been better for womankind had this instrument" [the uterine sound] "never been invented;" that "the splitting up of the cervix for dysmenorrhea and sterility has fallen into deserved disuse;" and that "Emmet's operation for the clumsy lacerated cervix should meet the same fate, at least in the vast majority of cases." * * * "In my practice it is rare to see a lacerated cervix which calls for surgical repairs."

Times have changed since then, and woman is now conceded to have diseases that do not begin or end in the womb, just as a man has. Her nervous diseases have at last become recognized as nervous counterfits of uterine disease.

A New Inc.—No sooner does a new remedy meet with popular professional favor, or promise to be so received, than some enterprising business man blends it or disguises it in a compound, especially and peculiarly prepared with the talesmanicine terminal to its new name, and offers it to the profession as the only particular preparation of the particular medicine of any value. None genuine without the firms trade mark *Inc.* Even that enterprising house, Johnson & Johnson, are now offering us *Lintine* for Lint, and his true and linton are good things,

Pharmaceutical "Ethics" and Pharmaceutical Honesty!

Mr. E. A. Schubert, of Fostoria, Ohio, in the course of a paper on "Pharmaceutical Ethics," gives this account of a practical test of the professional integrity and competency, and showing of the dishonesty of retail druggists in a given section of the State—a section, by the way, says the *Western Druggist*, probably the equal in professional intelligence and honesty of the average community in Ohio and other States. Mr. Schubert wrote a prescription of easy composition and analysis, to see how many druggists would

fill it correctly, mailing to each of fifty physicians one of the prescriptions, at the same time asking him to write it as a prescription of his own, send some friend with it to his druggist to have it filled, a copy taken and returned to him with the compound preparation. Out of the fifty requests sent out, he received thirty-seven answers. The preparation called for a three-ounce preparation, but placing them side by side he found twenty-one to be three-ounce preparations, seven were in size four ounces, while the rest ranged in size from five to eight ounces. It was to be an emulsion; nineteen were of that composition, the remainder were far from being true to name. In color, when correctly filled, it would be nearly white; of these twenty-two were true in color, while the remainder ranged from a steel gray to nearly all the known hues. The principal active ingredient was the acetate of morphine; thirteen only contained this, the remainder principally contained the sulphate. *Out of the entire number returned, eleven were found to be filled correctly.* The remainder were base substitutions, either through ignorance or intention. Of the eleven that were correct, nine came from the hands of Ph. G's, the remaining two were compounded by old and reliable druggists in the city. Of the twenty-six not properly filled we found five Ph. G's., the remainder were country druggists having very little experience in this line and located, with but few exceptions, in towns of 6,000 inhabitants or less."

This is a bad showing for American dispensing pharmacists in that locality. Does the same dishonesty prevail elsewhere? The suspicion, and in some instances the proof that it does, has caused many physicians to dispense their own medicines, especially when the tablet form may be used. Honest pharmacists should be looking to their interests by securing legislation against such rascality in their ranks. Honesty in the matter of dispensing medicine is good business policy as well as good morals. Ethical honesty and business prosperity go together in the profession of pharmacy as in the practice of medicine.

HOSPITAL NOTES.

St. Lawrence State Hospital, Ogdensburg, N. Y., Annual Report.—Number of patients remaining Oct. 1st, 1894; males, 509, females, 591, total, 1100. Per cent. of recovered on admissions, 10.4. Per cent. of deaths on whole number treated, 7.

Staff: Peter M. Wise, Supt.; J. Montgomery Mosher, Robt. G. Cook, Richard H. Hutchins, Flavius Packer, Caroline S. Pease, assistant physicians; Jas. Burton and Thos. C. Sawyer, medical internes.

The annual report for the year ending Oct. 1st, 1894, has some features which are a decided innovation upon the routine hospital report. It is a neatly bound volume of some 200 pages, which, in addition to the usual matter, contains medical papers written by the different members of the staff, the special report of the Superintendent to the state Commission in Lunacy, and some very fair illustrations of buildings, wards, etc. The contributions of the members of the medical staff make up about one-half the volume, and, while all are interesting, some are of decided scientific value and reflect credit upon the work of original research carried on in the St. Lawrence Hospital. They furnish a convincing answer to the strictures recently passed upon the officers of these institutions.

This report is in line with the reform which has been frequently urged in these columns, and we are encouraged to hope for the time when the annual report will be more of an index to the medical work and progress of the year and less of a trade bulletin.

In the Superintendent's report, Dr. Wise sheds some light upon the conditions which have helped in the development of this activity. The medical officers are as far as possible relieved of clerical work, thus giving them more time, while daily meetings of the staff held in a library of 749 medical volumes consolidate the interest of the different departments and furnish the impetus to renewed effort which official sympathy and approval alone can give. At these gatherings the experiences of the morning visitations are discussed with the Superintendent, the daily written reports are reviewed and elaborated by discussion; interesting cases are presented

for general consideration; new features of the service are offered to the staff for criticism and the hour is filled with current medical topics.

They have proved a success at Ogdensburg and might be adopted elsewhere with benefit.

Eastern Indiana Hospital for the Insane.—

Biennial report for the period ending Oct. 31, 1894. Males, 217, females, 233; total, 450. Per cent of recoveries on admissions, first year, 26.5; second year, 33.8. Per cent of deaths on whole number treated, first year, 5.36, last year, 6.6.

Staff: Samuel E. Smith, Supt.; Clinton T. Zaring and Wm. S. Tomlin, assistant physicians.

In his report the superintendent points out the evil which results from a good law badly administered. The laws of the State do not authorize the discharge of a patient till his condition justifies it. This means that chronic cases must remain in the hospital till discharged by death, and as each year's admissions contribute a large proportion to this class, the number of acute curable cases that can be provided for becomes proportionally smaller. At the present time Dr. Smith counts only 20 acute cases among 450 patients and predicts that in one year's time there will not be 10.

In 1890 there were in the Eastern district 677 insane persons with hospital capacity of 438.

The remedy urged is the increasing of the capacity of the Eastern Hospital fifty per cent. rather than the construction of new institutions.

The report also contains a very interesting analysis of the medical work of the biennial period. Among 148 patients admitted during the two years, five men were discharged as "not insane." This is a large number, especially in a State in which court commitments obtain. This would seem to indicate that the only advantage that can be claimed for this method has no real foundation.

Of 396 women admitted since the opening of the institution only two were paretics, both admitted during the period covered by the report.

Columbus State Hospital, Columbus, O., 56th Annual Report.—Number of patients remaining Nov. 15, 1894. Males, 652; females, 612; total, 1264. Per cent. of recoveries on admissions 27.31. Per cent. of deaths on whole number treated, 6.

Staff: A. B. Richardson, Supt.; Geo. Stocton, W. D. Deuschle, W. A. Schwallie and S. C. Lindsay, assistant physicians.

The Superintendent reports 43 males and 41 females as being at their homes on trial visits. In reference to these Dr. Richardson states that it has been the custom to continue all discharged patients upon the records until they have been put to the test of life in competition with the world at large. Every patient sent out is kept under observation till the close of the year at least, and frequently longer, if his mental condition seems to require it. This practice entails considerable difficulty, especially in such cases as have no immediate family or friends, but the resulting benefit both to the patient and the institution should fully compensate for the trouble.

Referring to a statement made by a correspondent in a medical periodical to the effect that 75 per cent. of the deaths among the insane in hospitals are from causes usually considered preventable. Dr. Richardson shows by an analysis of his own statistics that of 91 deaths only 13 could in any degree be considered preventable and these were from diseases which are every day causing death without any suspicion of neglect or improper treatment falling upon the medical attendant. Such hair-brained and baseless charges are hardly worthy of being taken so seriously.

Most medical officers will, it is thought, take issue with the author of the report upon the effect of forcible feeding. The statement is made that in cases that for months require forcible feeding inanition is sooner or later inevitable. One case at one time under the writer's care had been fed by the nasal tube exclusively for eight years and was at the end of that time in perfect physical health. Another case of melancholia showed a progressive gain in weight and physical health for the eighteen months she was fed by the nasal tube to the exclusion of all other nourishment. Such cases, many similar to which, it is thought, must fall within the experience of most asylum physicians do not bear out the assertion made in the report.

An interesting feature is a table of the admissions for the year, giving data bearing on prognosis, the duration of treatment and the present condition of all. This information is all contained in one table and gives a good idea of the work of the year.

Oregon State Insane Asylum, Salem, Oregon, Biennial Report.—Number of patients remaining Nov. 30, 1894: males, 662; females, 308; total, 970. Per cent. of recoveries on admissions, 25.6. Per cent. of deaths on whole number treated, 6.84.

Staff: L. L. Rowland, Supt.; W. T. Williamson, L. F. Griffith and W. H. McNary, assistant physicians.

In his report the superintendent deplors the ever increasing number of admissions with opium intoxication as the assigned cause. A table of thirty-five such cases is appended, showing sex, length of treatment, etc. Of this number, twenty-four were males and eleven females. Three males and four females combined the morphine and cocaine habits. A similar table of alcoholic inebriates shows that thirty-three were males and but two females.

Napa State Asylum for Insane.—Napa, Cal., 18th and 19th annual reports. Number of patients remaining June 30, 1894, males, 759; females, 576; total, 1335. Per cent of deaths on whole number treated, 7.7. Per cent of recoveries on admissions, 34.5.

Staff. A. M. Gardner, resident physician; L. F. Dozier, G. R. Bowles, Driesbach Smith, assistant physicians.

An innovation in this report is a meteorological table showing the average mean, maximum, minimum, highest and lowest temperatures per month and per year from 1876 to 1894 also the rainfall for the same period. This subject, while it does not enter very largely into the calculations for Eastern institutions is of great interest and importance in the West, and in this instance shows the advantage of Napa over other parts of the State as a site for a hospital for the insane.

Wisconsin State Hospital for Insane.—Mendota, Sixth biennial reports. Number remaining Sept. 30, 1894, males, 280; females, 199; total, 479. Per cent. of deaths on whole number treated, first year, 4.5; last year, 5.8.

Staff. Jno. B. Edwards, Supt.; F. A. Lyman and F. I. Drake, assistant physicians.

The report of the superintendent shows progress throughout the biennium. Among the improvements asked are special provision for epileptics and infirmary for each sex and an isolation hospital.

Examinations of State Hospital Superintendents.—In our zeal to abolish one abuse we often rush quite to the other extreme and wildly embrace an evil which differs from the one we are striving to overcome in form only. The well-known evils of inadequate medical qualification and of utilizing medical charities for machine political purposes, have tended to make of the "examination" and the "Civil Service Commission" idols before which we are wont

to prostrate ourselves in unquestioning adoration. That they are both good is unquestioned. That they are always judiciously conducted is not so self-evident. Appended is a copy of the paper given the candidates for qualification as superintendents in the State Hospitals for the Insane in the State of New York at a recent examination. The questions are, perhaps, their own best commentary. At the outset it will be borne in mind that applicants for examination are obliged by law to have had at least five years' experience as assistants, and consequently must be graduates of standing at least equal to that term. This, it is inferred, is in the opinion of the Commission a mistake, as after carefully reading the questions by which they propose to judge of the candidate's fitness to administer the affairs of one of these institutions, one is forced to the conclusion that, in the eyes of these gentlemen at least, the ideal superintendent must have been graduated within the last twelve months past. A good practical knowledge of the indications for trephining the skull, an important therapeutical point in the light of recent surgical developments, is less in value to the exact knowledge of prophylaxis, etiology and treatment of ophthalmia neonatorum as four is to five. Nevertheless, the assertion is unhesitatingly made that there are superintendents who have for years successfully conducted these institutions, and even attained eminence, who have never seen a case of sore eyes of the nature referred to, at least since medical school days. If we might be allowed to assume the office of examiner for the moment we would ask: What is Puerperal Insanity? Wherein do the symptoms of ordinary Mania or Melancholia differ from the symptoms of Mania or Melancholia in which this etiologic factor is present?

There are many points in the paper to which exception might be taken, but it is unnecessary to particularize. As a test of the qualification of an assistant for promotion to a superintendency, the paper is, in our opinion, inadequate and unfair; and the questions here propounded can only be considered as childish when their purpose is remembered. An intelligent and scientific body of men, such as the superintendents of the New York State Hospitals, ought to resent such trifling with the machinery by which additions are made to their members.

The following are the questions:

1. Describe the motor tract of the brain, through the brain and the Medulla. 5
2. Of what is the quadriceps extensor femoris composed? 2

3. Describe the course of the internal carotid artery on both sides of the body. 6
4. Give in detail (*a*) by what means albumenoids are digested; (*b*) starches; (*c*) how are fats absorbed? 6
5. Explain as far as known how the bodily heat is regulated. 4
6. Give a test for the detection of hydrochloric acid in the stomach contents. 4
7. How would you test a specimen of urine for (*a*) bile; (*b*) glucose? 5
8. What is acetone? 2
9. Describe the physiological action of (*a*) Digitalis; (*b*) Nitro-glycerine. 4
10. Give the therapeutic uses of Ergot and symptoms of ergotism. 4
11. Describe the etiology and symptoms of cirrhosis of the liver. 4
12. Give the etiology, pathology and treatment of multiple neuritis. 5
13. Describe in detail a case of syphilitic gumma of the base of the brain. 6
14. Give a full description of your ideas of the arrangement and classification of a hospital for the insane, having a capacity of 1600 beds. 8
15. What would be your daily allowance of the staple articles of food per capita in such an institution? 5
16. What are the pre-requisites to the admission of a patient to a State Hospital? 4
17. Give the prognosis and symptoms of puerperal insanity. 5
18. How would you treat the eclampsia of pregnancy? 3
19. Give the pophylaxis and etiology of ophthalmia neonatorum. How would you treat a case? 5
20. How would you treat a fracture of the neck of the femur? 4
21. Give the indications for trephining the skull. 4
22. How would you treat a case of erysipelas? 3

J. E. M.

Massachusetts General Hospital.—The trustees of the Massachusetts General Hospital and the Physicians of the McLean Hospital invited the officers of kindred institutions, the Physicians of Boston, Belmont and elsewhere, the Benefactors of the Hospital and the town officers of Belmont, to inspect the new McLean Hospital at Waverley, on Tuesday, October 1st, from 11 o'clock, A. M. to 3 o'clock, P. M. Ladies cordially invited. Luncheon at half past twelve o'clock.

We acknowledge the receipt of an invitation to be present on that interesting occasion, and regret our inability to attend. Such reunions are both pleasant and profitable, promoting the true spirit of professional fraternity and fostering medical progress and scientific advancement.

REVIEWS, BOOK NOTICES, ETC.

INDEX-CATALOGUE OF THE LIBRARY OF THE SURGEON-GENERAL'S OFFICE, U. S. A.

This valuable work of reference now is completed with Vol. XVI. To Dr. Jno. S. Billings, Deputy Surgeon-General, U. S. A., all honor and credit are due for bringing this great work to satisfactory completion.

"This volume completes the alphabet, and is therefore the final volume of the first series of the Index-Catalogue. The manuscript of a second series, including all the titles of books and articles received too late for insertion in the first series, has been prepared, and will probably make five volumes of the same size and style as those constituting the first series. The appropriation for printing Vol. I. of this series has been granted by Congress, and the work will therefore proceed without interruption, the manuscript for the first volume being now nearly ready for the press. In presenting this final volume of the first series, Dr. Billings acknowledges and returns sincere thanks for the great assistance which has been given by many persons in the collection and cataloguing and indexing of this library, and in securing the publication of the Index-Catalogue,

"As regards the collection of books and pamphlets which forms the library, and which now includes 116,847 books and 191,589 pamphlets, it is to be observed that practically all of them have been obtained within the last thirty-five years, and that at least one-sixth of them have been presented, either in exchange or as a direct gift to the library. There are few medical writers now living who have not sent to the library at least one pamphlet, hence a complete list of donors would be too long to print in this place."

Dr. Billings, who retires from the army with exalted rank and honor, deserves the plaudits of the profession he has long adorned in its military circle for the signal ability, industry and devotion with which he has perseveringly pushed along this great work of inestimable value to advancing medicine, and of glory to the American profession.

CLIMATE AND HEALTH is a summary of statistics for the four weeks ending July 27th, edited under the direction of Professor Willis L. Moore, Chief of the Weather Bureau, and W. F. R. Phillips, M. D., and is a very creditable and instructive report sent out by the Department of Agriculture on a subject which suggests the inquiry: Why the Government has not a Department of Medicine as well as of Agriculture, and why so great a department of science as that of medicine, moving as it does the world with great discoveries, and through the sciences allied with it, should be made subordinate to the only quasi-scientific department of agriculture?

The fault appears to be with the medical profession in not asserting its claims and demanding its rights in a Bureau of Medicine, and its chief and eminent physician in the cabinet. The profession needs a medical bureau, the people need it, the government should have one. The sanitary interests of the people, the Army and the Navy, are no less important to the nation than arms and ships and well-trained soldiers and marines.

A TEXT BOOK ON NERVOUS DISEASES. Just ready. By American Authors. Edited by Francis X. Dercum, M. D., Ph. D., Clinical Professor of Nervous Diseases in the Jefferson Medical College of Philadelphia. Magnificent octavo, 1052 pages, 341 engravings and 7 colored plates; cloth, \$6.00; leather, \$7.00.

This work is representative not only of American Neurology, but likewise of the best methods of teaching as developed in the leading medical colleges of this country. Actual experience with our social and climatic conditions is essential as a qualification in those who would speak with authority upon this especial subject. The great number of the cases and their exceptional importance from a financial standpoint have attracted many of the ablest medical minds of America to Neurology, and their writings now at hand will be for the same reason of the utmost value to every practitioner. Lea Brothers & Co., 706, 708 and 710 Sansom street, Philadelphia, are the publishers.

This is the first treatise on neurology that placed the credit where it belongs to Dr. E. H. van Deusen, of Kalamazoo, Michigan, for first describing Neurasthenia, and to call attention to the fact that the term could be found in the earlier edition of Dunglison, but the author omits to mention the fact that the editor of this journal was the first to call attention to this subject.

GRAY ON NERVOUS AND MENTAL DISEASES. This is a new and thoroughly revised edition. Lea Brothers & Co., Publishers, 706, 708 and 710 Sansom Street, Philadelphia.

Dr. Gray's book is notable for its clear, adequate and masterly exposition of both nervous and mental diseases within the limit of a single convenient volume. These affections, owing to their widespread prevalence in this country, possess unrivalled importance for American physicians, and their clinical peculiarities, arising from social and climatic conditions, render actual experience essential to the preparation of a work of practical utility. Illustrations abound in typical portraits, admirable engravings and clear diagrams, and in the present edition it has been enriched with colored plates.

DR. A. B. SHAW'S MANUAL OF DIAGNOSTIC NEUROLOGY is a clearly written text book for students, containing the essential signs and symptoms of neurological diagnosis in succinct form. The author has hardly done justice to his Western colleagues in his references to workers and work done in Neuroiatry, a common failing of Eastern and European authors, by the way.

Authors lose nothing by cultivating a broad catholic spirit, that recognizes home, as well as alien contributions to the common fund of medical knowledge.

CLINICAL LECTURES ON THE NERVOUS SYSTEM, BY GOWERS.—The announcement of Clinical Lectures on Diseases of the Nervous System by this well-known English author is a proclamation of an intellectual treat to the neurologist and a rare and palatable bill of fare to the general practitioner of medicine. Gowers is a great clinical observer in neuriatry and close reasoner in neurological problems. The book is well worth the price, two dollars.

Blakiston, Son & Co., 1012 Walnut Street, Philadelphia, are the publishers.

Demonstration of New Methods of Diagnosis and Treatment of Diseases of the Stomach and Intestines; The Gyromele, the Gastric Motor Meter, the Stomach Needle-Douche, the Nebulizer, the Stomach-Tube Filter, the Rubber Bib and Pouch. By Fenton B. Turck, M.D., Professor of Diseases Stomach and Intestines at the Chicago Post-Graduate Medical School, etc., Chicago.

Antero-Lateral Sclerosis; Posterior Sclerosis; Pathology and Treatment of Locomotor Ataxia by Suspension and by Apparatus. By De Forrest Willard, M.D., Surgeon to the Presbyterian Hospital, Philadelphia, etc., and Guy Hinsdale, M.D. Assistant Physician to the Orthopedic Hospital and Infirmary for Nervous Diseases, etc., Philadelphia.

On Uncontrollable Drunkenness Considered as a Form of Mental Disorder, with the only Possible Means of Legally Dealing with such Cases. Second Edition. By L. Forbes Winslow (M.B. and LL.M. Cantab., D.C.L. Oxon., M.R.C.P. London), Senior Physician to the British Hospital for Mental Disorders, etc., London.

The Stacke Operation for Caries Involving the Middle Ear as Modified and Practised by Prof. Hermann Schwartze, with an Historical Sketch, Method of Operating, and Report of Twelve Consecutive Cases. By Dr. C. R. Holmes, Ophthalmic and Aural Surgeon to the Cincinnati Hospital, etc., etc., Cincinnati.

On Syphilis of the Nervous System (with a Critical Digest.) By W. Julius Mickle, M.D., F.R.C.P. (London), Medical Superintendent, Grove Hall Asylum, London. This is a truly critical digest of this important subject from "mouths of wisest censure."

Neuralgia of the Right Trigeminal Nerve of Eight Years' Duration; Excision of the Three Divisions at the Gasserian Ganglion; Recovery, with Partial Destruction of the Ganglion. By J. T. Eskridge, M.D., and Edmund J. A. Rogers, M.D., Denver.

Chronic Progressive Chorea. (Hereditary Chorea: Huntington's Chorea.) Report of an Interesting Case in a Negro. By William Francis Drewry, M.D., First Assistant Physician Central State Hospital for the Insane, Petersburg, Va.

Crossed Knee-Jerk, or Contra-Lateral Adductor Reflex. By Guy Hinsdale, M.D., and John Madison Taylor, M.D., Assistant Physicians to the Orthopædic Hospital and Infirmary for Nervous Diseases in Philadelphia, etc.

The Infiltration Method of Local Anesthesia in Genito-Urinary Surgery. By Bransford Lewis, M. D., Professor of Genito-Urinary Surgery and Venereal Diseases, College of Physicians and Surgeons, etc., etc., St. Louis.

Three Cases of Friedreich's Disease (Hereditary Ataxy) Associated with Genetous Idiocy. By M. J. Nolan, L. R. C. P. I., L. R. C. S. I.; Medical Superintendent, Down District Asylum, Downpatrick, Ireland.

Flat-Foot; Its Correction and Comparative Study with the Foot of the Orang, Chimpanzee, Gorilla and Baboon, (Illustrated by Photographs.) By B. Merrill, Ricketts, Ph.B., M.D., Cincinnati, Ohio.

Renal Affections Following Influenza. By G. Baumgarten, M. D., Professor of the Practice of Medicine in the St. Louis Medical College, Medical Department of Washington University, St. Louis.

Brain Resistance to Uremic Poison. By Dr. Brummell Jones, Professor of Diseases of the Brain and Nervous System in the College of Physicians and Surgeons, etc., etc., Kansas City, Mo.

A Case of Hydrosalpinx; Removal of the Right Tube and Ovary without Rupture of the Sac. By Hunter Robb, M.D., Professor of Gynecology, Western Reserve University, Cleveland, O.

The Treatment of Laryngeal Tuberculosis, with a Report of Cases. By Robert Levy, M. D., Professor of Physiology and Laryngology in Gross Medical College, etc., Denver, Col.

The Relations of Infectious Processes to Mental Disease. By Charles K. Mills, M.D., Professor of Mental Diseases and of Medical Jurisprudence in the University of Pennsylvania, etc.

Ueber den Einfluss des Hungerns auf die neugeborenen Thiere insbesondere auf das Gewicht und die Entwicklung des Gehirns, Von Prof. W. v. Bechterew, St. Petersburg.

Ueber das Paranuclearkorperchen der gekerneten Erythrocyten, nebst Bemerkungen uber den Bau der Erythrocyten im Allgemeinen. Von Dr. Ludwig Bremer, St. Louis, Mo.

The Administration of Quinine in the Light of Blood-Examinations for the Plasmodium, and Some General Remarks on Malaria. By Ludwig Bremer, M.D., St. Louis, Mo.

Insanity and Phthisis, their Transmutation, Concurrence and Co-existence. By H. A. Tomlinson, M.D., Superintendent St. Peter's State Hospital, St. Peter, Minn.

Report of Two Interesting Cases. Word-Blindness; Localized Muscular Spasms Illustrating Cerebral Localization. By J. M. Keniston, M.D., Middletown, Conn.

The Diagnostic Value of the Medical Laboratory. By Wm. M. Harsha, A. B., M. D., Lecturer on Surgery at the College of Physicians and Surgeons, etc., Chicago.

Nucleins. By William H. Porter, M. D., Professor of Clinical Medicine and Pathology at the New York Post-Graduate Medical School and Hospital, etc., New York.

Antiphrisine; Reports on Professor Klebs' New Tuberculin Derivative and Some of the Cases Treated. By Charles Denison, A. M., M. D., Denver, Col.

Indications for Electrolysis in Angelioma and Goitre. By Charles R. Dickson, M.D., Electro-Therapist to Toronto General Hospital, etc., Toronto, Ontario.

Favorable Results of Koch's Tuberculin Treatment in Tubercular Affections that are not Pulmonary. By Charles Denison, A. M., M. D., Denver, Col.

Three Cases of Enucleation of the Eye, with Remarks. By Leartus Connor, A.B., M.D., Ophthalmic Surgeon to Harper Hospital, Detroit, Mich.

Clinical Lectures on the Treatment of Chronic Glandular Gastritis at the Cook County Hospital, Chicago. By Fenton B. Turck, M.D., Chicago.

Valedictory Address; Delivered to the Graduating Class of the Miami Medical College, April 5, 1894. By C. R. Holmes, M.D., Cincinnati.

Observations on Mental Affections in Children, and Allied Neuroses. By William W. Ireland, M. D. Edin., Mavisbush, Polton, England.

Der hintere Zueihugel als Centrum fur das Gehor, die Stimme und die Reflexbewegungen. Von Prof. W. v. Bechterew, St. Petersburg,

Bright's Disease and Insanity. By E. D. Bondurant, M. D., Assistant Superintendent of the Alabama Insane Hospital, at Tuskaloosa.

Studies on the Lesions Produced by the Action of Certain Poisons on the Nerve-Cell. By Henry J. Berkley, M. D., Baltimore, Md.

Clinical Notes on Psoriasis, with Especial Reference to its Prognosis and Treatment. By L. Duncan Bulkley, A.M., M.D., New York.

Boracic Acid and Massage in Pannus. By C. R. Holmes, M.D., Ophthalmic Surgeon to the Cincinnati Hospital. etc., Cincinnati.

The Bryson Symptom in Exophthalmic Goitre. By Hugh T. Patrick, M. D., Professor of Neurology in the Chicago Polyclinic.

The Immunizing Effects of Antitoxin. By F. Gordon Morrill, M. D., Visiting Physician to the Children's Hospital, Boston.

Postural Pathology and Therapeutics in Obstetrics and Gynecology. By William B. Dewees, A.M., M.D., Salina, Kansas.

Herniotomy-Osteotomy, By Samuel E. Milliken, M. D., Attending Surgeon to Randall's Island Hospital, New York.

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A Concise Report of Some Interesting Rectal Cases. By Leon Straus, M.D., St. Louis, Mo.

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Clinical Study of the Individual Insane. By H. A. Tomlinson, M.D., St. Peter, Minn.

Some Current Errors Respecting Insanity. By C. B. Burr, M. D., Flint, Mich.

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Max Nordau and his Critics. By G. Frank Lydston, M.D., Chicago.

Uric-Acid Formation. By William Henry Porter, M. D., New York.

The Analysis of a Crime. By Joseph L. Bauer, M.D., St. Louis.

Hypnotism at Nancy. By Hugh T. Patrick, M. D., Chicago.



